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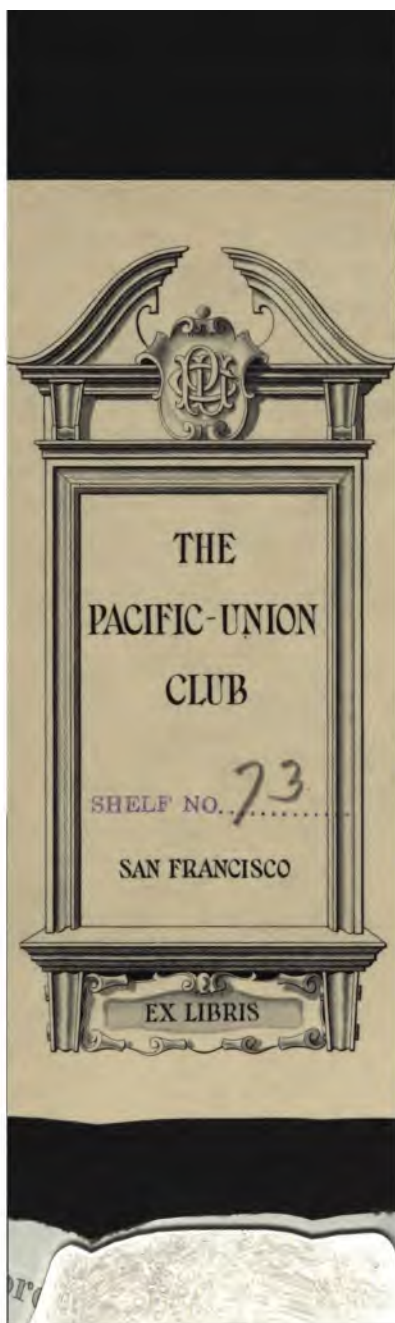
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COLLECTED WORKS  
OF  
THE RIGHT HON. F. MAX MÜLLER

XVII

*LAST ESSAYS*

- I. ESSAYS ON LANGUAGE, FOLKLORE  
AND OTHER SUBJECTS



# LAST ESSAYS

BY THE

RIGHT HON. PROFESSOR F. MAX MÜLLER, K.M.

LATE FOREIGN MEMBER OF THE FRENCH INSTITUTE

## *FIRST SERIES*

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## PREFACE

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THESE Essays were selected by my father for republication just as his illness assumed its last acute form ; therefore they have not had the advantage of the thorough revision he would have given them had his life been spared. He generally added largely to his articles before he republished them, and that such had been his intention in the present case could be seen from the copious notes that he had prepared dealing with the subjects of some of the articles to be republished ; but, unfortunately, none of these notes were sufficiently worked out to be used by any hand but his.

The Lecture on Coincidences, which was a subject that greatly exercised his thoughts, would have been expanded ; indeed I find that he had collected materials for that purpose sufficient to fill a small volume. He had long felt the important bearing of the coincidences between Christianity and Buddhism in their rubrics and ritual, especially since the study of

the Pâli Canon had made it clear that any borrowing had been *from* the Buddhist Canon, which was written down a century before the Christian era, and had existed orally from the time of Asoka, third century B.C. It is to be regretted that he should not have been spared to give us the result of his researches into this interesting subject ; but as he himself wrote : ' What author has ever said the last word he wanted to say, and who has not had to close his eyes before he could write *Finis* to his work ? There are many things still which I should like to say, but I am getting tired, and others will say them much better than I could, and will, no doubt, carry on the work where I had to leave it unfinished.' Doubtless some younger student of Pâli will turn his attention to this important question.

I have been compelled to abandon all attempt at making any use of my father's notes, unless I had confided the editing of these Essays to far more experienced and professional hands than mine, and therefore have had to content myself with simply reprinting them as they originally appeared, without trying to bring them up to date ; in fact, I have practically altered nothing.

I take this opportunity of thanking the



editors of the various periodicals for their kind permission to reprint these papers.

A second Series of Essays on the Science of Religion will be published in the late autumn of this year. I should have wished to bring out both volumes simultaneously, but I was most anxious to include the three articles on the religions of China, which appeared in the *Nineteenth Century* last autumn and were my father's last work, the third article appearing actually after his death, and these articles are, unfortunately, not available for use before the expiration of a year from the date of their publication.

W. G. MAX MÜLLER.

MADRID, *April*, 1901.

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## LAST ESSAYS.

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### THE SIMPLICITY OF LANGUAGE<sup>1</sup>.

IT is more than a quarter of a century since I ventured for the first time (June, 1861) to address the Members of the Royal Institution, and I well remember the feeling of fear and trembling that came over me when in this very place I began to deliver my first lecture on the Science of Language, as one of the physical sciences. I was young then, and to find myself face to face with such an audience as this Institution always attracts, was indeed a severe trial. As I looked round to see who were present, I met in one place the keen dark eyes of Faraday, in another the massive face of the Bishop of St. David's, in another the kind and thoughtful features of Frederick Maurice, while I was cheered with a look of recognition and encouragement from dear Stanley. I could mention several more names, men, take them all in all, we shall not look upon their like again. To address such an audience on a subject that could never be popular, and without any of those charming experiments which enliven the discourses of most

<sup>1</sup> Lecture delivered at the Royal Institution, March 17, 1887.

lecturers in this room, was an ordeal indeed. But painful as the ordeal was, I do not regret having passed through it. Many of my most valued friendships date from that time, and though in advocating a new cause and running full tilt against many time-honoured prejudices, one cannot always avoid making enemies also, yet I feel that I owe a large debt of gratitude to this Institution, and not to my kind friends only, but likewise to my honest opponents.

It is hardly remembered now that before the time when I boldly claimed a place among the physical sciences for what I called the Science of Language, Comparative Philology was treated only as a kind of appendix to classical scholarship, and that even that place was grudged to it by some of the most eminent students of Greek and Latin. No doubt the works of Bopp, Grimm, Pott, Benfey, Curtius, Schleicher, had at that time attracted attention in England, and the labours of such scholars as Donaldson, Latham, Garret, and others could well claim a place by their side for originality, honesty of purpose, and clearness of sight. But there is a difference between Comparative Philology and what I meant by the Science of Language. Comparative Philology is the means, the Science of Language is the end.

We must begin with a careful analytical and comparative study of languages; we must serve our apprenticeship as phoneticians, etymologists, and grammarians before we can venture to go beyond. In this respect I am as great a pedant as ever, and shall rather continue to be taunted as such than abate one iota from my implicit faith in phonetic laws. What I said years ago in my lectures on the Science

of Language, that phonetics must form the foundation of Comparative Philology, and that the laws which determine the changes of vowels and consonants are as unchangeable as the laws which regulate the circulation of our blood, may have been a little exaggerated, but in this respect exaggeration is decidedly better than the smallest concession. I also hold still to another heresy of mine, for which I have been much abused, namely, that a knowledge of Sanskrit is a *sine qua non* for every comparative philologist, whether his special subject be Aryan, Semitic, or Turanian Philology. I know it has been the fashion of late to cry down the importance of Sanskrit, because it does not supply the key to all secrets, and because in some, nay, in many cases, Sanskrit is less primitive than Greek, or Irish, or Gothic. This is a capital lesson to learn, and may, I hope, put an end at last to the false position which Sanskrit still occupies in the eyes of certain scholars as the fountain head of all Aryan speech. But with all this, Sanskrit will always maintain its pre-eminence, as affording the best discipline to the student of language; and we have only to compare the works of those who have mastered Sanskrit, and of those who have not, whether they treat of Greek, or Latin, or Armenian, or Albanian, in order to perceive the immense difference between the scholar who sails with a safe compass and the bold adventurer who trusts to the stars.

Comparative Philology is a delightful subject, and the more it is cultivated the more fascinating it becomes, by the very minuteness of the laws and rules which govern its proceedings. There is enough in it to absorb a man's whole mind, enough to occupy

a whole life. But for all that, we must not forget that the study of languages has an object beyond itself, a wider purpose, a higher aim.

And what is that higher purpose which the Science of Language is meant to serve? It is to discover the secrets of thought in the labyrinth of language, after the dark chambers of that labyrinth have first been lighted up by the torch of Comparative Philology. If there are any here present who attended my former courses on the Science of Language, delivered in this Institution, they will remember how often I appealed to the philosophers, whether logicians, physiologists, or metaphysicians, inviting them to a study of language which, like the thread of Ariadne, would lead them safely through the intricate passages of the human mind, through which they had been groping their way for so many centuries without ever meeting the monster which they meant to slay. In my lectures on Comparative Mythology, in particular, I tried to show the irresistible influence which language, in its growth and decay, has exercised on thought, not only in what is commonly called Mythology, the stories of gods and heroes, but in every sphere of knowledge, call it religion, philosophy, science, or anything else. We may do what we like, our thoughts are always hide-bound in language, and it is this inevitable phase of thought and language, inevitable in every branch of knowledge, which I meant by Mythology, using that word in a far wider sense than had ever before been assigned to it. In order to make my meaning quite clear, and to provoke, if possible, contradiction, that is, independent thought, I called Mythology a disease of language, though adding at the same



time that it was to be considered as an infantine disease, as a natural crisis through which our intellectual constitution must pass in order to maintain its health and vigour. Now it is curious that those who expressed their agreement with me that mythology, including metaphysics, might indeed be considered as a disease of language, did not ask themselves what in that case the health of language would mean. Right language is right thought, and right thought is right language; and if we want to understand, not only the disease, but the health also, of our thought, that is to say, the whole life of our thought, we can study it nowhere more efficiently than in the pathology of language.

The Science of Language, therefore, was to me at all times but a means to an end—a telescope to watch the heavenly movements of our thoughts, a microscope to discover the primary cells of our concepts. I have waited for many years, hoping that some one better qualified than myself might lay hold of the materials collected by the comparative philologists, and built with them a new system of philosophy. Everything was ready—the ore was there, it had only to be coined. But whether philosophers mistrusted the ore, or whether they preferred to speculate with their time-honoured tokens rather than with the genuine metal, certain it is that, with few exceptions, no philosopher by profession has as yet utilized the new facts which the Science of Language has placed at his free disposal.

I know the answer that will be made. The results of the Science of Language, it has often been said, are as yet so unsettled. They vary from year to year,

and the best authorities in Germany, France, and England, to say nothing of America, differ *toto cœlo* from each other on some of the most fundamental principles. Some hold that, like the law of gravitation, the laws which govern the growth and decay of language admit of no exceptions; others hold, on the contrary, that disturbances in the regular courses of words may here lead to the discovery of an unsuspected Neptune. Dialects, according to some, are the descendants of one uniform language; according to others they are the feeders of the classical languages, and exist not only before a common literary language can be framed, but continue to influence its later development by constant intercommunion. Dialect, in fact, has become the general name for the *centrifugal* tendencies of language, whether originating in individuals, families, villages, towns, or provinces, as opposed to the *centripetal* power of analogy, represented by the sway which, whether for good or for evil, majorities always exercise over minorities. But even on minor points there have been most sanguinary battles between hostile camps of comparative philologists. Whether the original Aryan language possessed one short *a* only, like Sanskrit, or whether the *a* was already, before the separation of the Aryan family, differentiated into *a*, *e*, *o*, has been treated as a matter of life and death; and I do not deny that in the eyes of the true scholar it is a matter of life and death. But it does not follow that because Curtius hesitated on this point he therefore deserves all the ignominious epithets that have been showered upon his head. Among scholars by profession all this is understood. Curtius holds, and will

hold, his place of honour in the history of Comparative Philology in spite of all that has of late been written against him, and no one will be more ready to admit this, I believe, than Brugmann, Osthoff, and others, who have attacked him so fiercely. I am sorry for rude and ungracious language at all times, but I do not mind an honest fight. What I object to is, that critics, who are too lazy to form an opinion for themselves, amuse themselves, and think they can amuse others, by collecting a number of passages from the writings of these philological champions in which they not only contradict each other flatly, but bandy epithets with which they seem but too familiar, whether from the study of slang dictionaries or from their partiality for the customs of primitive savages. Let every man judge for himself, and give his opinion and his reasons for it; but simply to point out that Bopp has been called an *ignoramus* by somebody—it may be even by some one who is somebody—that Sir William Jones has been dubbed a mere pretender, or Darwin a fool, may no doubt serve to raise a smile, and to bring a whole subject into discredit, but it can do no possible good. What province is there in the whole realm of human knowledge in which there is no difference of opinion? None, I should say, except where there is for a time neither life, nor progress, nor discovery. It is because there is at present intense vitality in the comparative study of ancient languages, traditions, customs, mythologies, and religions that there is in it that constant friction, that frequent scintillation, but also that constant increase of new light. Do you think we shall ever have infallibility and immutability

in the republic of learning? I hope not, for to my mind that would mean nothing but sluggishness, languor, and death. Scholars welcome everybody who in the open tournament of science will take his chance, dealing blows and receiving or parrying blows; but the man who does not fight himself, but simply stands by to jeer and sneer when two good knights have been unseated while breaking a lance in the cause of truth, does nothing but mischief, and might, indeed, find better and worthier employment.

To say, therefore, that the results of Comparative Philology, Ethnology, and Mythology are still too uncertain to make it safe for a philosopher to take them into consideration, is mere laziness. The river of knowledge, like all other rivers, will never stop flowing for timid men to pass through with dry feet; it will flow on *in omne mutabilis ævum*, and we must take our header into it, and swim or drown.

There is one advantage at least in getting old. To a young man, or I should rather say to a man of middle age, to see the pendulum swinging from one extreme to the other, to see the views which he learnt with implicit faith from his teacher demolished by men it may be far inferior in knowledge, judgement, and character, is often disheartening. But if one is allowed to watch the clock of knowledge for a longer time than is commonly allotted to hard-working students, one feels comforted on seeing the pendulum returning once more to the opposite side, and one finds out that after all there was more to be said for the exploded errors than we imagined thirty years ago.

I say one feels comforted, though others would

probably say, 'Is, then, our knowledge nothing but a perpetual swing-swong? Must we be content with always oscillating between truth and untruth, and does the flux and reflux of scientific opinion always leave us exactly where we were before?' No; I certainly do not take so desponding a view of our human destiny. On the contrary, I feel convinced that while the pendulum vibrates regularly backwards and forwards, the finger on the dial—to keep to our metaphor—moves onward, slowly but steadily—unless there is something wrong in the wheels within wheels which represent the incessant toil of honest and unselfish workers.

You may of late years have heard a good deal about new views in Comparative Philology. I highly appreciate every one of these new views, but I do not therefore entirely surrender the old views. There has not been a cataclysm, a complete break between the old and the new, as some giddy people want to make out. There has been, as there ought to be, a constant reform, but there has never been a *coup d'état*. Some of the very foundations of our science have had to be re-examined, and have been strengthened by new supports. Some important additions have been made with regard to phonetic laws, and on the whole it has been found that many things which were accepted as beyond doubt were, after all, not quite so certain as they seemed at first.

Let us only take one instance. You have probably all heard of what I called *Grimm's Law*, and what, as I fully admit, would more correctly have been called *Grimm's Rule*. However, it may be called at least an Empirical Law, for it contains the observa-

tion of a uniformity in the changes of consonants in Low German and High German, as compared with all the other languages of the Aryan family. We find the observation of that uniformity in its crudest form in Rask. It was afterwards generalized and more firmly established by Grimm. Still, a number of exceptions remained, and these were gradually diminished by the discovery of new rules by Lottner, Grassmann, and Verner. But even now much remains to be done. There are still exceptions to be accounted for, such as Gothic *fadi*, which, as Sanskrit has the accent on the first, ought to be *fathi*; or Gothic *hvathar*, whether, which, as Sanskrit *katará* has the accent on the last, should be *hvadar*. Nay, I believe that a higher /aw has yet to be discovered to account for the influence which, according to Verner, the accent immediately *before* Sanskrit tenuis is supposed to exercise. If the accent is on the vowel immediately preceding the tenuis in Sanskrit, the tenuis becomes aspirate in Low German; if not, the Sanskrit tenuis appears in Low German as the corresponding media. Thus Sanskrit *bhrâtar* becomes in Gothic *brôthar*, *t* being replaced by *th*; but Sanskrit *pitâr* becomes *fadar*; Sanskrit *mâtâr*, Anglo-Saxon *môdor*. Why? Simply because the accent in Sanskrit was immediately before the *t* in *bhrâtar*, but not so in *pitâr* and *mâtâr*. This shows how closely languages are held together, a change of accent in Sanskrit being sufficient to explain the change of *th* and *d* in Gothic, Anglo-Saxon, and other Low-German dialects. But we have, as yet, the facts only. Why the accent should exercise this influence we do not know, unless we suppose that the accent before the tenuis draws



the tenuis towards the preceding vowel, makes it, as it were, the final of a syllable, and secures to it that aspiration which a tenuis would claim if the final of a word<sup>1</sup>.

I wish I could give you to-day a fuller account of the excellent work that has been done during the last twenty years by such men as Lottner, Grassmann, Verner, Ascoli, Fick, Ludwig, Schmidt, Collitz, Brugmann, Osthoff, de Saussure, Schrader, and many others. You would be surprised at the perfection which has been attained in the elaboration of phonetic rules, in the observations on the working of analogy, in the more exact definition of technical terms, and in the historical conclusions to be drawn from the facts supplied by a comparison of cognate languages.

But my object to-day is a different one. I wish to call your attention to the progress that has been made in our comprehension of language itself. Now, whatever views were formerly held about language, everybody was agreed that language was a most wonderful thing, so wonderful, in fact, that perhaps the wisest thing that could be said about it was that it must have been of superhuman or divine origin. It was quite clear that, though men might frame new out of old words, no man could ever frame at his own pleasure a word entirely new. Nor did nature seem to have supplied primitive humanity with a vocabulary, for all vocabularies differed, and every person capable of speaking had to learn his language from his parents. Whence, therefore, could language, with its millions of words, come to us except from a superhuman and

<sup>1</sup> See Heyne, *Laut- und Flexionslehre*, p. 98; also Sweet, *History of English Sounds*, p. 9.

supernatural source? We wonder at the infinite number of stars, and we well may. One look at that silent eternal procession is worth all the miracles of all religions put together. But if the stars on high and the still small voice within seemed to the greatest philosopher the two greatest miracles, might he not have added the galaxy of words as the third great miracle that passes all understanding, though it occurs every day before our very eyes? If you consider that the great English Dictionary, now being published by the University Press at Oxford, is to contain 250,000 words, that is, a quarter of a million, and that on a low average every word admits of at least ten changes by means of declension, conjugation, or degrees of comparison<sup>1</sup>, you have before you, in English alone, two millions and a half of words, every one a bright star of human thought. I wonder what the number of the stars in heaven may be. Struve, I am told, formed a guess that their number might amount to two millions! But the visible stars, up to stars of the fifth magnitude, amount to 1,382 only, and I doubt whether anybody here present has ever seen more than twice that number, as I doubt whether many people have ever used more than twice that number of words. At Oxford, as Professor Pritchard informs me, the stars which we see with the naked eye are about 2,800—about the same as the number of the members of the University in their various degrees of light and magnitude.

No doubt English is one of the richest languages, and much of its wealth is kept only in reserve. A poet

<sup>1</sup> A Greek verb, according to Curtius, admits of 807 modifications; a Sanskrit verb of 891.

is very eloquent who uses more than 10,000 words. It is all the more amazing, therefore, to see the intellectual wealth of languages spoken by the lowest savages. Owing chiefly to Darwin's reports, it has been the fashion to represent the inhabitants of Tierra del Fuego as standing on the very lowest rung of the ladder which represents the ascent or the descent of man. You remember what Darwin said of them. They seemed to him like the devils which come on the stage in such plays as the *Freischütz*. 'Viewing such men,' he says, 'one can hardly believe that they are fellow creatures and inhabitants of the same world. Their language, according to our notions,' he adds, 'scarcely deserves to be called articulate. Captain Cook has compared it to a man clearing his throat; but certainly no European ever cleared his throat with so many hoarse, guttural, and clicking sounds!' These Fuegians, as they appeared to Darwin, may be responsible for much that is now called Darwinism. But even with regard to the physical features of these Fuegians, Darwin must either have been very unlucky in the specimens he met, or he cannot have kept himself quite free from prejudice. Captain Parker Snow, in his *Two Years' Cruise off Tierra del Fuego*, speaks of the same race as without the least exaggeration really beautiful representatives of the human race. Professor Virchow, who exhibited a number of Fuegians at Berlin, strongly protested against the supposition that they were by nature an inferior race, or that they might be considered as a connecting link between ape and man. Captain Parker Snow sent me, in 1885, the following interesting letter:—'I am now over sixty-seven years old'—that makes him now

seventy—' but I would gladly voyage again among those so-called savages, and my wife—same age—coincides. Indeed, we have both lived among wild tribes in various parts of the globe, and never once received aught but kindness and love from them, whether in the Pacific, or Australia, or Tierra del Fuego. Nor from the days when, as a boy in 1834-5, I was much among them, and often since, have I once lifted a weapon to harm them. No occasion. I and mine found them honest, and *above* the ordinary "civilized" lower strata of life, "cannibals" (when from necessity, or revenge, or policy—"to imbibe the white man's powers") though they were.'

But what shall we say of their language? The same language which to Darwin's ears seemed hardly articulate is described by Giacomo Bovi, who learnt their language, as consisting of *parole dolci, piacevoli, piene di vocali*. The Yahgan dialect, which has lately been more carefully studied by missionaries, has a dictionary of 32,430 words. Now, let us remember that Shakespeare, in the enormous variety of his plays, achieved all he wished to achieve, expressed all he wished to express, with 15,000 words, not quite half the wealth of the language spoken by those devils of the *Freischütz*, whom Darwin could hardly believe to be fellow creatures. Every one of these words represents an intellectual effort, and every one of them can be either declined, conjugated, or compounded, according to the strict laws of a most complicated grammar.

I have always had the fullest belief in Darwin's devotion to truth, and I had expressed my conviction that, if the real facts about the language and the

general character of the Fuegians were placed before him, he would withdraw the strong language which he had used, after but a short stay among them. And so it was. In a letter, dated Down, Kent, November 22, 1881, Darwin wrote to Captain Parker Snow:—

‘DEAR SIR,—I hope that you may succeed in publishing a new edition of your *Cruise to Tierra del Fuego*. You saw so much more of the natives than I did, that, wherever we differ, you probably are in the right. Indeed, the success of the missionary establishment there proves that I took a very erroneous view of the nature and capabilities of the Fuegians.’

That is what I call real Darwinism—love of truth, not of self or system. It is the heart that makes the true man of science, not the brain only.

What, then, has the science of language done for us in explaining that stupendous wealth of words and forms, whether in English, or in Sanskrit, or in Hebrew, or in Turkish, or even in the language of the so-called devils of Tierra del Fuego? It has completely changed the aspect of the miracle, and instead of exhibiting language as something incomprehensible, bewildering, and supernatural, it has shown us that the process by which this supposed miracle of language has been wrought is perfectly simple, natural, and intelligible. We no longer stare at language in utter bewilderment, but we understand it. Give us the materials, and we can build up a language, perhaps more perfect, though, it may be, less beautiful, than English, Sanskrit, or Fuegian.

But what are these materials?

Whatever language we take, we find that it can be analysed, and as the result of our analysis we find everywhere *material* and *formal* elements. In *giver* and *gift*, for instance, the material element is *give*, the formal elements are *er* and *t*. In *to wit*, in *witness*, and in *wittingly*, we easily see the permanent material element, *wit*, used in the sense of knowing, and followed by such formal elements as *ness* and *ing*. These material elements are generally called roots, and it stands to reason that in modern languages it is often very difficult to discover the true roots. There have been so many phonetic changes that, in order to discover the most primitive form of a root, we must always go back to the more primitive languages. The same root, *wit*, for instance, exists in English in such words also as *history*, but no one who did not know that this word came to us from Rome and Greece would be able to discover the presence of the root *wit* in *history*. In Greek we know it, because we know that, according to fixed phonetic rules, initial *v* is dropt, *d* before *t* is changed to *s*, thus giving us *istôr* instead of *vid-tar*, the Sanskrit *vet-tar*.

Now this is one thing which the Science of Language has achieved. It has discovered the material elements or roots in all the Indo-European languages. But while this achievement belongs to the nineteenth century with us, it belonged to the fifth century B. C. in India. In India the earliest grammarians asked the question, which we have asked but lately, namely, what is language made of, and they found, as we have found, that it consisted of those material elements or roots, and of a certain number of formal elements, called suffixes, prefixes, and infixes. This was a



wonderful achievement, particularly for men whom certain people even now would call savages or niggers. The result of this analysis, or taking to pieces of the Sanskrit language, is now before us in a list of about 2,000 roots, which is ascribed to the great grammarian Pânini, who lived about the same time as Aeschylus. Given that number of roots and there is no word in Sanskrit which Hindu grammarians do not undertake to build up. That is to say, the whole flora of the Sanskrit dictionary has been traced back by them to about 2,000 seeds. Wonderful as this achievement is, we must not exaggerate. Many of the etymologies of the native Indian scholars are fanciful. The idea that it should be impossible to trace any word back to a root, never entered their heads. If there is no root, a root is invented for any special word, for according to their views, the only object of a root is to account for the existence of a word. Hence many of these roots which we find collected by Pânini may be safely set aside. From our point of view we are quite prepared to admit that Sanskrit, like other languages, may possess words of which the roots can no longer be discovered. We could not discover, for instance, the root of such a word as *history*, if Latin and Greek had been swept away out of existence; nor should we know that the root of *age* was *I*, to go, unless we could follow up historically the traces of that word from *age*, to *eage*, *edage*, *aetaticum*, *aetas*, *aevitas*, *aevum*, and Sanskrit *eva*, which comes from the root *I*, to go.

If we sift the list of roots in Sanskrit, retaining such roots only as can be traced in the actual literature, the number of 2,000 dwindles down to about

800. That is to say, with about 800 material elements we can account for the whole verbal harvest of India. Now that harvest is as rich as that of any other of the Aryan languages, and what applies therefore to Sanskrit, applies, *mutatis mutandis*, to Greek, Latin, and all the other Aryan languages. Their stock in trade is no more than about 800 roots. I should even say, it is considerably less, because as languages grow they drop a number of scarce and isolated words, and supply their wants by new derivatives, or by new metaphorical expressions. I see that Professor Skeat, in his list of the principal Aryan roots occurring in English, brings their number to no more than 461.

Imagine, then, what a difference this makes in our view of language. We may feel bewildered by a quarter of a million descendants, but we can manage 800 ancestors; and if we can once manage these 800 ancestors, their descendants, whatever their number, need no longer perplex and frighten us.

In this respect the Science of Language has brought daylight where all before seemed dark and confused. Whatever in language is not material is formal. These formal elements are in many cases material elements in a metamorphic state. Thus *hood* in *child-hood*, which is now a formal element, used to form collective and abstract nouns, was still, not many centuries back, a living word, the Anglo-Saxon *hād*, meaning state or rank. This *hād* again is related to the Gothic *haidus*, meaning manner, way; and this *haidus* exists in Sanskrit as *ketú*, a sign. When we have come so far, we ask what is this *ketú*, and we find that its root is *kit*, to observe, to see, while *u*

is a purely formal element, used to form nominal and verbal bases in Sanskrit.

Besides these metamorphic words—the soil, as it were, left by a former vegetation—the Aryan languages make use of a number of demonstrative elements, with which to form nouns, adjectives, and verbs from roots. These were at first intended to point to whatever was meant to be the subject of a predicative root. If there was a root meaning to strike, then *strike-here* might be ‘striker,’ a fighter; *strike-there*, might be ‘wound;’ *strike-it* might be ‘sword.’ After a time these demonstrative elements became differentiated and specialized, and they stand now before us as suffixes, and terminations of nouns and verbs.

What has so far been established by the Science of Language is this, that, if we have, say, 800 material or predicative roots, and a small number of demonstrative elements given us, then, roughly speaking, the riddle of language is solved. We know what language is, what it is made of, and we are thus enabled to admire not so much its complexity as its translucent simplicity.

There remains, however, the old question, ‘Whence these roots?’ We have found them by careful digging, we have pulled them out of the ground, and there can be no doubt about their reality. There they are, but people want to know how they came to be there; nay, they seem more eager on that point than on the whole subsequent growth of language.

There was a time when the existence of roots was denied altogether, and words were derived straight, either from imitations of the sounds of

nature, particularly the cries of birds and the shouts of animals, or from interjections, such as we utter ourselves, whether we like it or not, when under the sway of pleasure or pain, or any other powerful passion. Nothing could sound more plausible. Could the name of the *cuckoo* be anything but the imitation of the bird's note? Could *tolderollol* be anything but a shout of joy? Do we not hear in *to chuckle* the sound of suppressed laughter, and in *to chuck* the clucking of the hen? Now *to chuckle* means also to fondle, so that we can clearly see how so abstract an idea as to caress or to love may be expressed by a sound imitated straight from the cackling of a hen.

And why should not a complete language have been formed by the same process? If *bow-wow* was used for barking, why should it not be used also in the sense of persecuting? If *poo-h-poo-h* was an expression of disgust, why should it not be accepted as the name of a critical review? And if those who generally *bow-wow* and *poo-h-poo-h* moderate occasionally the breath of their indignation, or change it into a more or less loud breeze of mutual love and admiration, why should that not be called a *puff*, from which *puffer*, *puffery*, *puffiness*, and all the rest.

All this goes on swimmingly for a short time, but then comes a sudden precipice. There are onomatopoeic elements in every language, but they end where real language begins. They are like volcanic rocks breaking here and there through the superincumbent stratified layers of speech. We know perfectly well what they are, they require no explanation whatever; but they are certainly not what we mean by speech, by discourse, or Logos. I had to fight these two

theories when I delivered my lectures on language five-and-twenty years ago. In order to describe them by short and clear names I called them the *Bow-wow* and *Pooh-pooh* theories. Description was taken for irony; but whether these names contained truth or irony, certain it is that both these theories are now dead, never to rise again, I hope.

But though so much is gained, and we are not likely to be troubled again with derivations of words direct from the crude sounds of nature, there remains the question to be answered, namely: 'What is the origin of those roots which stand like a rampart between the chaos of sounds expressive of mere feelings and the kosmos of words expressive of concepts?'

It is perfectly right to ask that question, but it is also right to see that such a question can admit of a hypothetical answer only. Think of what times we are speaking!—times when no Aryan language existed, when no verb or noun had yet been formed, when man, in fact, was hardly yet man in the full sense of that word, but only the embryo of a man, without speech, and therefore without reason. We can enter into all the secret workings of the human mind, building up for itself the shell of language, after the materials were once given. But a state of mind without language and without reason is more than we can fully realize. All we can do is to guess, and to guess cautiously.

There are three things that have to be explained in roots, such as we find them:—

(1) Their being intelligible not only to the speaker, but to all who listen to him;

(2) Their having a definite body of consonants and vowels;

(3) Their expressing general concepts.

In my former lectures I called attention to the fact that everything in nature that is struck, vibrates and rings. This is the widest generalization under which the vocal utterances of man can be classed. Under the influence of certain emotions the human body finds relief in more or less musical sounds, produced by the breath passing either slowly or violently from the lungs to the larynx, and from the larynx to the mouth.

This is perfectly true; but these sounds which naturally accompany our emotions, though they may supply the material, are very far as yet from being roots. It was Professor Noiré who first pointed out that roots, in order to be intelligible to others, must have been from the very first social sounds, sounds uttered by several people together. They must have been what he calls the *clamor concomitans*, uttered almost involuntarily by a whole gang engaged in a common work. Such sounds are uttered even at present by sailors rowing together, by peasants digging together, by women spinning or sewing together. They are uttered and they are understood. And not only would this *clamor concomitans* be understood by all the members of a community, but, on account of its frequent repetition, it would soon assume a more definite form than belongs to the shouts of individuals, which constantly vary, according to circumstances and individual tendencies.

But the most difficult problem still remains. How did these sounds become the signs, not simply of

emotions, but of concepts? for we must not forget, all roots are expressive of concepts. To us nothing seems more natural than a concept. We live in concepts. Everything we name, everything we reason about, is conceptual. But how was the first concept formed? that is the question which the Science of Thought has to solve. At present we simply take a number of sensuous intuitions, and after desecring something which they share in common, we assign a name to it, and thus get a concept. For instance, seeing the same colour in coal, ink, and a negro, we form the concept of black; or seeing white in milk, snow, and chalk, we form the concept of white. In some cases, a concept is a mere shadow of a number of percepts, as when we speak of oaks, beeches, and firs, as trees. But suppose we had no such names as black, and white, and tree; where would our concept be?

We are speaking, however, of a period in the growth of the human mind when there existed as yet neither names nor concepts, and the question which we have to answer is, how the roots which we have discovered as the elements of language came to have a conceptual meaning? Now the fact is the majority of roots express acts, and mostly acts which men in a primitive state of society are called upon to perform; I mean acts such as digging, plaiting, weaving, striking, throwing, binding, &c. All of these are acts of which those who perform them are *ipso facto* conscious; and as most of these acts were continuous or constantly repeated, we see in the consciousness of these repeated acts the first glimmer of conceptual thought, the first attempt to comprehend *many things as one*.

Without any effort of their own the earliest framers of language found the consciousness of their own repeated acts raised into conceptual consciousness, while the sounds by which these acts were accompanied became spontaneously what we now call conceptual roots in every language.

In this manner all the requirements which roots have to fulfil are satisfied. They are necessarily intelligible to a whole community, because they refer to acts performed in common. They have a definite or articulate sound, because they have been repeated so often that all individual or dialectic variety has been eliminated; and they have become conceptual because they express not a single accidental act, but repeated acts from which all that is purely accidental, temporal, or local, has been slowly removed or abstracted.

Professor Noiré, who has most carefully analysed this primitive process in the formation of conceptual thought, thinks that true conceptual consciousness begins only from the time when men became conscious of results, of facts, and not only of acts. The mere consciousness of the acts of digging, striking, binding, does not satisfy him. Only when men perceived the results of their acts—for instance, in the hole dug, in the tree struck down, in the reeds tied together as a mat—did they, according to him, arrive at conceptual thought in language. I do not dispute this, but even if we admitted that the concepts embodied in our roots did not arrive at their full maturity till the acts which they expressed had become realized objectively by their results, we must not forget that every language retains the power of predicating these roots, and that only by that



power is it able to produce its wealth of nouns and verbs.

In Sanskrit the number of these roots has been estimated at about 800, and the great bulk of the Sanskrit dictionary has been traced back to these 800 living germs. But this is not all. If we examine these 800 roots more carefully, we find that they do not represent an equal number of concepts. There are, for instance, about seventeen roots, all meaning to plait, to weave, to sow, to bind, to unite; about thirty roots, all meaning to crush, to pound, to destroy, to waste, to rub, to smooth; about seventeen meaning to cut, to divide, and so on. I believe the original meaning of roots was always special, but became generalized by usage, though, on the other side, certain roots of a general meaning became specialized also. But the important fact which has been established and can no longer be doubted is, that the 800 roots which supply our dictionary can be reduced to about 120 concepts. These 120 concepts are really the rivers that feed the whole ocean of thought and speech. There is no thought that passes through our mind, or that has passed through the minds of the greatest poets and prophets of old, that cannot directly or indirectly be derived from one of these fundamental concepts. This may seem to lower us very much. We thought ourselves so rich, and now we find that our intellectual capital is so small: not more than 120 concepts. But does that prove that we are poor? I believe not. Nature has not become poor because we know that the infinite wealth which it displays before our eyes consists of no more than about seventy-two elements, nor is our mind poor because

the elements of thought have been reduced to 120, and might, with some effort, be reduced to a smaller number still. What remains to us is the power of combination, of composition and decomposition; and if that power has enabled us to decipher Egyptian hieroglyphics, to determine the metals in the sun, to discover the seventy-two elements of nature, and to elicit the 120 elements of thought, we need not be ashamed. Nature produces the greatest effects by the smallest means, and man ought to be proud to follow her example.

## MY PREDECESSORS<sup>1</sup>.

IN writing my book, *The Science of Thought*, my chief object was to collect all the facts which seemed to me to bear on the identity of language and thought. I sifted them, and tried to show in what direction their evidence pointed. But, as I imagined myself as addressing a very small special jury, it seemed to me unnecessary, and almost disrespectful, to bring any pressure to bear on them, except the pressure inherent in facts. I therefore did not avail myself as fully as I might otherwise have done, of the many witnesses that I could have brought into court to support by their authority the truth of the theory which I propounded. I mentioned, indeed, their names, but I did not call upon them to speak for me or for themselves. The fact is, that I did not expect that public opinion at large could, at the present moment, be very much interested in a question which had been discussed many times before, but which, as far as I could see, was by nearly all living philosophers, particularly by those living in this country, answered in a direction diametrically opposed to that which I, following the lead of the greatest philosophers of antiquity, of the Middle Ages, and of more modern times, considered the right one. I know how long I myself, living under the influence of

<sup>1</sup> *Contemporary Review*, October, 1888.

prevailing systems of philosophy, had hesitated to give up the old belief that language is a product of thought; that thought must always come first, language after; that thought is independent of language, and that the Greeks were great bunglers when they called language and thought by one and the same name, *Logos*. A long life, devoted to the study of philology and philosophy, was necessary before I could free myself of the old words—that is, the old thoughts—and cease to treat language as one thing and thought as another. Much astronomical observation was required before people could persuade themselves that their evening star was the same as their morning star<sup>1</sup>, and much linguistic observation will have to be performed before anybody will see clearly that our language is really our thought and our thought our language.

But though I was quite prepared that the verdict of living philosophers would, for the present at least, be adverse to my theory, I was not prepared to find nearly all my critics under the impression that this theory of the identity of thought and language was quite a novel theory, something quite unheard of—in fact, a mere paradox. This showed the same want of historical knowledge and fact which surprised so many philosophers in Germany and France at the time of the first appearance of Darwin's book *On the Origin of Species*. Most of the leading reviews in England seemed to consider the theory of evolution as something quite novel, as a kind of scientific heresy, and they held Darwin personally responsible for it, whether for good or for evil. Darwin himself had at last to protest against this misapprehension, to point

<sup>1</sup> See, however, *Hibbert Lectures*, by Sayce, pp. 258, 264.

out the long succession of the advocates of evolution, from Lucretius to Lamarck and Oken, and to claim for himself what he really cared for, a legitimate place in the historical evolution of the theory of evolution.

In Germany and France the doctrine of the identity of language and thought has at once been recognized as an old friend, as a theory that had almost been battered to pieces in former historical conflicts, but which, like the theory of evolution, might well claim for itself a new hearing on account of the immense accumulation of new material, chiefly due to the study of the science of language during the present and the past generations. I myself, so far from pretending to propound a new philosophy, thought it right to point out how some of the greatest philosophers have held to the same theory, though without being able to support it by the important evidence supplied by the study of comparative philology, or to perceive quite clearly all the consequences which must flow from it. It seemed certainly strange that a theory which was, to mention more recent philosophers only, accepted without any misgivings by such men as Herder<sup>1</sup>, Schleiermacher, W. von Humboldt, Schelling, and Hegel, in Germany; by Archbishop Whately, and Mansel, in England; by De Bonald, De Maistre, and Taine, in France; and by Rosmini in Italy, should have been treated as a complete novelty, or as a mere philological mare's nest, by men who stand in the foremost ranks of philosophers in England. What should we say if our best scientific reviews shrank from the theory of the homogeneity of light, heat, and magnetism as an unheard-of novelty, or as a mere

<sup>1</sup> *Science of Thought*, pp. 30, 129.

scientific paradox? But such has nevertheless been the attitude of some of the best philosophical journals in England, in discussing, or rather in declining to discuss, the identity of language and thought, which in my *Science of Thought* I tried to support, chiefly by the evidence brought together during the last fifty years by the Science of Language.

It may be useful, therefore, to look back, in order to see what form our problem had assumed before the Science of Language had thrown new light upon it. In France this problem of the identity of language and thought has always remained on the order of the day. The controversy between Nominalism and Realism has left there a far deeper impression than in England, and it has not been forgotten that one of the principal tenets of the Nominalists was that our knowledge of universals consisted entirely in words. It was Condillac (1715-80) and his school in the last century who gave new life to this old controversy, though his well-known dictum, 'Nous ne pensons qu'avec les mots,' went certainly beyond the point which had been reached by the older Nominalists<sup>1</sup>. The question is what he meant by *penser*, and if *penser* meant, as it does according to Condillac, no more than *sentir*, it would not be difficult to prove that not only sensation, but also imagination, can take place without language. We must define what we mean by thought before we can understand its

<sup>1</sup> 'Qu'est-ce au fond que la réalité qu'une idée abstraite et générale a dans notre esprit? Ce n'est qu'un nom. . . . Les idées abstraites ne sont donc que des dénominations. . . . Si nous n'avions point de dénominations, nous n'aurions point d'idées abstraites, nous n'aurions ni genres ni espèces, nous ne pourrions raisonner sur rien' (Condillac, *Logique*, II<sup>me</sup> partie, chap. v).

identity with language. It was Rousseau (1712-78) who at once perceived the weak point in Condillac's statement. He saw that, if we used the name of thought for all mental work, we ought to distinguish between at least two kinds of thought, thought in images, and thought in words. As a poet and as a dreamer Rousseau was naturally aware how often we are satisfied with images; that is to say, how often we indulge in mere imagination and call it thinking. And though it is quite true that with us who are so saturated with language there are few images which on closer examination turn out to be really anonymous, yet we cannot deny the possibility of such mental activity, and are bound to admit it, particularly in the earlier periods of the development of the human mind. It is this kind of thought which has been often claimed for animals also<sup>1</sup>. Rousseau therefore remarks, very justly, 'Lorsque l'imagination s'arrête, l'esprit ne marche qu'à l'aide du discours,' 'When imagination stops, the mind does not advance except by means of language'<sup>2</sup>.

<sup>1</sup> De Bonald, *De l'Origine du Langage*, p. 67: 'Les brutes, qui éprouvent les mêmes besoins, reçoivent aussi les images des objets que l'instinct de leur conservation les porte à fuir ou à chercher, et n'ont besoin de langage. L'enfant, qui ne parle pas encore, le muet qui ne parlera jamais, se font aussi des images des choses sensibles, et la parole nécessaire pour la vie morale et idéale ne l'est pas du tout à la vie physique.'

<sup>2</sup> De Bonald, loc. cit., p. 65, remarks: 'Ce qui veut dire qu'on ne peut penser qu'au moyen de paroles, lorsqu'on ne pense pas au moyen d'images.' Haller expressed almost the same idea, when he said: 'Ita assuevit anima signis uti, ut mera per signa cogitet, ac sonorum vestigia sola omnium rerum repræsentationes animæ offerant, rarioribus exemplis exceptis, quando affectus aliquis imaginem ipsam revocat.' (*Elementa Physiologiae Corporis Humani*, 1769, tom. v. 561.)

But, even supposing that our modern philosophers should treat Condillac and Rousseau as ancient and forgotten worthies, surely they must have heard of Dugald Stewart in Scotland (1753-1828), of De Bonald (1754-1840) and De Maistre (1754-1821) in France. Now, Dugald Stewart was not ashamed to teach what the Nominalists had taught before him—namely, that for the purpose of thinking three things are necessary: *universalia*, *genera*, and *words*. If Dugald Stewart had not persuaded himself that Sanskrit was a mere forgery of the Brahmins, he might have learnt a new lesson—namely, that all our words, even those which we call singular, are derived from general concepts, in so far as they must be traced back to roots embodying general concepts. This discovery, however, was reserved for later comers. In the meantime, men like De Bonald and De Maistre in France did not allow the old argument to sleep. But curiously enough, while formerly the idea of the identity of thought and language was generally defended by philosophers of the type of Hobbes, by the supporters of sensualistic theories who derive all our knowledge from the impressions of the senses and their spontaneous associations, we have in De Bonald and De Maistre men of the very opposite stamp—orthodox, almost mystic philosophers, who nevertheless make the identity of thought and language the watchword of their philosophy. It is true that even Bossuet (1627-1704) inclined in the same direction. In his famous treatise, 'De la Connaissance de Dieu et de soi-même,' he allows that we can never, or, with the usual proviso of weak-kneed philosophers, hardly ever, think of anything without



its name presenting itself to us. But De Bonald went far beyond this, as will be seen from the following extracts<sup>1</sup> :—

In his treatise on the origin of language he says : ‘There was geometry in the world before Newton, and philosophy before Descartes, but before language there was absolutely nothing but bodies and their images, because language is the necessary instrument of every intellectual operation—nay, the means of every moral existence<sup>2</sup>.’ He puts the same idea into more powerful, though at first sight somewhat perplexing language, when he says : ‘Man thinks his word before he speaks his thought, or, in other words, man cannot speak his thought without thinking his word<sup>3</sup>.’

De Maistre, who belongs to the same school as De Bonald, and whose ultimate conclusions I should feel most unwilling to adopt, shows, nevertheless, the same clear insight into the nature of language. Thus he writes : ‘The question of the origin of ideas is the same as the question of the origin of language ; for thought and language are only two magnificent synonyms. Our intellect cannot think nor know that it thinks without speaking, because it must say, “I know<sup>4</sup>.”’

And again : ‘It is absolutely the same thing whether one asks the definition, the essence, or the name of an

<sup>1</sup> *Œuvres de M. de Bonald, Recherches Philosophiques sur les Premiers Objets des Connaissances Morales.* Paris, 1858.

<sup>2</sup> *Loc. cit.*, p. 73.

<sup>3</sup> *Loc. cit.*, p. 64 : ‘L’homme pense sa parole avant de parler sa pensée ; ou autrement, l’homme ne peut parler sa pensée sans penser sa parole.’

<sup>4</sup> *Soirées de St.-Petersbourg*, i. p. 75.

object <sup>1</sup>! . . . . In one word, there is no word which does not represent an idea, and which is not really as correct and as true as the idea, because thought and language do not differ essentially, but represent the same act of the mind, speaking either to himself or to others <sup>2</sup>.

I say once more that I am the last person to follow these French philosophers to their last conclusions. Their object is to show that language, being what it is, cannot have been a human invention, but must have been a divine revelation <sup>3</sup>. I quote them here as representative men only, and as showing how familiar the idea of the identity of thought and language was on the Continent during the first half of our century—an idea which, by some of the most prominent philosophers in England, has been treated as an unheard-of paradox.

Of course it may be said that De Bonald, and De Maistre too, are ancient history; that the first half of this century was a mistake, and that true and positive philosophy dates only from the second half of our century. But even then, those who wish to take part in the discussion of the great problems of philosophy

<sup>1</sup> Loc. cit., i. p. 135.

<sup>2</sup> Loc. cit., i. p. 131.

<sup>3</sup> 'Si l'expression est nécessaire, non-seulement à la production de l'idée ou à sa révélation extérieure, mais encore à sa conception dans notre propre esprit; c'est-à-dire, si l'idée ne peut être présentée à notre esprit ni présentée à l'esprit des autres que par la parole orale ou écrite, le langage est nécessaire, ou tel que la société n'a pu, dans aucun temps, exister sans le langage, pas plus que l'homme n'a pu exister hors de la société. L'homme n'a donc pas inventé le langage. . . . La nécessité de la révélation primitive du langage a été défendue dans l'*Encyclopédie* par le savant et vertueux Beaufeu. Charles Bonnet et Hugh Blair entrent dans le même sentiment.'—De Bonald, loc. cit., p. 199.

ought to know that the question of the identity of language and thought has never to the present day been neglected by the leading philosophers of Germany and France. Let us take one, who has not only proved himself most intimately acquainted with the most recent schools of philosophical thought in England, but has often been claimed as a disciple of Stuart Mill—let us take M. Taine, and what do we find, in his great work, *De l'Intelligence*, first published in 1870? Without the slightest hesitation, without any fear that what he says could sound strange to well-schooled philosophical ears, or be taken for mere paradox even by the outside public, he writes<sup>1</sup>:—

‘What we call a general idea is nothing but a name; not the simple sound which vibrates in the air and sets our ears in motion, nor the assemblage of letters which blacken the paper and touch our eyes—not even these letters apprehended mentally, or the sound of them mentally rehearsed, but that sound and those letters endowed, as we perceive or imagine them, with a twofold character, first of producing in us the images of individuals belonging to a certain class, and of these individuals only; secondly, of reappearing every time when an individual of that class, and only when an individual of that same class, presents itself to our memory or our perception.’

And again<sup>2</sup>:—


‘Hence arise curious illusions. We believe we possess, besides our general words, general ideas; we distinguish between the idea and the word; the idea seems to us a separate act, the word being an

<sup>1</sup> Loc. cit., p. 35.

<sup>2</sup> Loc. cit., i. p. 66.

auxiliary only. We actually compare the idea and the image, and we say that the idea performs in another sphere the same office in presenting to us general objects which the image performs in presenting to us individuals. . . . Such is the first of our psychological illusions, and what we call our consciousness swarms with them. The false theories arising from them are as complicated as they are numerous. They obstruct all science, and only when they shall have been swept away will science become simple again.'

I could go on quoting passage after passage from M. Taine's work, and I may say, with regard to him too, that, though accepting his facts, I by no means accept all the conclusions he draws from them.

 I agree with him that word and idea are but two names for the same thing. I agree with him, when he, like Locke, shows the impossibility of animals ever reaching the intellectual level of language, for the simple reason that they cannot reach the level of general ideas. But I differ from him when he thinks that the origin of language and the original formation of words can be explained by watching the way in which a child of the present day acquires the use of a language ready made, though even here our opinions are by no means so far apart as he imagines. We are concerned with different problems, but we agree at all events as to the manner in which these problems ought to be treated, not by mere assertion and counter-assertion, but by a comprehensive study of facts, and by a careful examination of the opinions of those who came before us.

The unhistorical treatment of philosophy, for which some English philosophers have been of late frequently,

and, I think, justly, reprehended, entails far more serious consequences than might be imagined. I admit it gives a certain freshness and liveliness to philosophical discussions. Completely new ideas, or ideas supposed to be new, excite, no doubt, greater enthusiasm, and likewise greater surprise and indignation. But life, nay, even history, would be too short, if we were always to begin again where Thales, Aristotle, or Descartes began, or if the well-known results of Kant's 'Critique of Pure Reason' were published to the world as the most recent discoveries of synthetic philosophy.

Another inconvenience arising from this unhistorical treatment of philosophical questions is felt even more acutely—namely, that in defending an old theory by new arguments we are often supposed to be pleading our own cause. Darwin, particularly in his earlier books, speaks of the cause of evolution, not as if it were anything personal to himself, but as a trust handed down to him, almost as an heirloom of his family; anyhow, as a valuable inheritance dating from the earliest days of awakening physical and philosophical inquiry. In his later books he becomes more and more self-conscious, and seems restrained from applying that rapturous language to the results obtained by the theory of evolution which those who follow him feel perfectly justified in applying to his and their own labours. I have been blamed for speaking with unconcealed rapture of the theory of the identity of language and thought, and I certainly should feel that I deserved blame if this theory had really been of my own invention. But, knowing how many of the most authoritative philosophers had held

the same views, I felt at perfect liberty to speak of it, as I did, as the most important philosophical truth, in fact, as the only solid foundation of all philosophy.

I also took it for granted, though it seems I ought not to have done so, that the misunderstandings which had formerly beset this theory, and had been demolished again and again, would not be repeated with the innocent conviction that they had never been thought of before.

Of course, such an expression as identity of thought and language can be cavilled at. If Kant is right, no two things in space and time can ever be identical, and if people really take identical in that sense the sooner the word is altogether superseded the better. When we say that language and thought are identical, we mean that they are two names of the same thing under two aspects. There is a very useful term in Sanskrit philosophy, 'aprithagbhâva' ('the not being able to exist apart'), and it is this, the impossibility of thought existing apart from language, or language from thought, which we mean when we call the two identical. We can distinguish for our own purposes, and these purposes are perfectly legitimate, between the sound and the meaning of a word, just as we can distinguish between the pitch and the timbre of our voice. But though we can distinguish, we cannot separate the two. We cannot have timbre without pitch, nor pitch without timbre; neither can we have words without thought, or thought without words. There never was on one side a collection of vocables, mere *flatus vocis*, and on the other a collection of concepts. The two were always one and

indivisible, but not one and indistinguishable. We can certainly distinguish the sound of a word from its meaning, but we must not expect to meet with meanings walking about in broad daylight as disembodied ghosts, or with sounds floating through the air, like so many Undines in search of a soul. The two were not two, but were one from the beginning, and the *πρῶτον ψεῦδος* lies in this attempted divorce between sound and meaning.

After words have been formed, as embodied thoughts, no doubt it is possible to imitate and repeat their sound without knowing their meaning. We have only to speak English to a Chinaman, and we shall see that what to us is English is to him mere sound and jabber. It is no longer language, because it is of the essence of language to be sound and meaning at the same time.

But then it is asked—Is our thinking always speaking? I say, yes, it is, if only we take speaking in its proper sense. But if we mean by speaking the mere vibrations of our vocal chords, then thinking is not always speaking, because we can suppress these vibrations, and yet keep in our memory the sound which they were meant to produce, and the meaning which that sound was meant to convey. It is this speaking without voice which has come to be called thinking, while thinking aloud has monopolized the name of speaking. The true definition, in fact, of thinking, as commonly understood, is speaking *minus* voice. And as this kind of thinking is that which is most commonly used for intense intellectual work, people have become so proud of it that they cannot bear to see it what they call degraded to mere

speaking without voice. Still so it is, as every one can discover for himself, if he will only ask himself at any moment what he is or has been thinking about. He can answer this question to himself and to others in words only. Nor is there anything degrading in this, and at all events the greatest philosophical thinkers, the Greeks, did not think so or say so, for they were satisfied with one and the same word for thought and speech.

Nor do we really, when we examine ourselves carefully, ever detect ourselves as thinking only, or as thinking in the abstract. How often have I been asked, not whether I think without words, but whether I think in English or in German. What does that mean? It means, whether I speak to myself in English or in German, and no more. The idea that I could speak to myself in no language at all is too absurd to be even suggested.

The results which the Science of Language has arrived at, and which are by no means so startling as has been supposed, are shortly these:—We have sensations without language, and some of these sensations may produce in men, as well as in animals, involuntary cries.

We have perceptions or images without language, and some of these may be accompanied by gestures or signs, such gestures and signs being often intelligible to others belonging to the same kind.

We have concepts, but these we can never have without words, because it is the word which embodies originally one feature only of the whole image, and afterwards others, and thus supplies what we call abstract concepts, to which nothing can ever respond



in imagination, nothing in sensation, nothing in nature.

Here it is where the Science of Language has supplied the historical proof of what would otherwise have remained a mere postulate. We know, as a fact, that about 800 roots will account for nearly the whole wealth of the Sanskrit Dictionary. We can account for these roots in different ways, the most unobjectionable being that suggested by Noiré, that they were originally the *clamor concomitans* of the conscious acts of men. Now, let us take an instance. Man would have received the sensation of brightness from the stars in the sky, and it is possible, at least I should not like to deny it, that animals too might receive the same sensation. After a time, when the same starry sky was observed night after night, and year after year, the stars as bright points would be remembered, and would leave an image of separate sparkling points, nay, it may be, of certain very prominent constellations in our memory. Nor is there any reason to doubt that, without any language, the mere image of certain constellations appearing on the sky might from the earliest times have evoked the images of concomitant events, such as the approach of cold weather, or the return of spring, in the minds of our most savage ancestors. *Speculation*

But with all that, there was as yet no word, and, in consequence, no concept of a star. What we call stars, as different from the sky to which they seem attached, as different also from sun and moon, were as yet bright images only.

Now, the next decisive step was this. The Aryan man possessed what we call roots, sounds which had

*Did you  
ever see  
an animal  
looking*

*could  
have  
copied  
without  
name*

often been used while he and his friends were engaged in acts of scattering, dispersing, strewing. One of these sounds may have been STAR. We find it in Latin, *ster-no* and *stramen*; in Greek, *σπο-έννυμι*; in Gothic, *strauja*; English, to *strew*, and its many derivatives. In all these words, the root, we say, is STAR, though we need not assert that such a root ever existed by itself before it was realized in all the words which sprang from it. One of the features of the bright sparkling points in heaven was their scattering or strewing sprays of light. By means of the root STAR this one feature was abstracted from the rest of the image, and the stars were thus at the same time called and conceived as strewers: in Sanskrit, *star-as*; in Greek, *ἀστέρ-ες*; in Latin, *stellae*, i. e. *sterulae*; in English, *stars*.

This word *star* was not meant for any single star, it did not correspond to a sensation, nor to any vague image or recollection of stars; it was a name representing one abstract feature of the stars, namely, their scattering of light in a dark night. It was man's own creation, and corresponded to nothing in nature, unless it was predicated afterwards of this or that particular star. It was so general, in fact, that, as soon as special stars had to be named, new determining or individualizing names became necessary. When it was observed that certain stars always retained their place, while others travelled about, the former were named fixed stars, the latter travellers or planets<sup>1</sup>, till at last every prominent star received some kind of name, that is to say, was known and called as different from all the rest.

<sup>1</sup> *Lectures on the Science of Language*, i. p. 8.

We see the same process everywhere, though it is not always possible to discover with perfect certainty what specific features in the objects of nature were selected for the purpose of knowing and naming them, or, in other words, from what root their names were derived. Let us examine the name of *tree*. Here it is quite clear that the most primitive savage must have had the sensation produced by trees growing up all around him, and giving him shelter against the sun, possibly supplying food also to appease his hunger. Let us suppose that that sensation was on a level with the sensation which animals also receive from trees. I do not think it was, but I am willing to grant it for argument's sake. The hundreds and thousands of trees which made an impression on the eyes of these savages must soon have become indistinguishable, and left an image in the memory of a very general and indistinct character. Some philosophers maintain that animals also have these blurred images, and that they would mistake a post for a tree. Again, for argument's sake, I do not mean to contest it.

But now comes a new step. Men, and men alone, in the earliest stages of their life on earth, began to take hold of certain trees, tear off their bark, hollow out their stems, and use these in the end for making beds, boats, and tables, and for other purposes. Concomitant and significative of this act of tearing off the bark of trees, the Aryan people had a root *DAR*; in Greek, *δέλω*; in English, to *tear*. Being chiefly interested in trees because they could thus be peeled and shaped and rendered useful, they called a tree in Sanskrit *dru*; in Greek, *δρῦς*; in Gothic,

*triu*; in English, *tree*. This was but one out of many names that could be applied to trees for various reasons, more or less important in the eyes of the Aryan savages; and here, even for the sake of argument, I cannot bring myself to admit that any animal could have done the same. We must bear in mind that there is really nothing in nature corresponding to tree. If it simply meant what could be shaped, there are hundreds of things that can in various ways be shaped. If it was confined to trees, there are again hundreds of trees, oaks, beeches, fir-trees, &c.; but no human eye has ever seen a tree, nor could any artist give us an idea of what a tree may be as a mere phantasma in the mind of man or animal<sup>1</sup>.

If all this is true, it follows that no concept, not even the concept of so simple an object as a tree, was possible without a name. It was by being named, that is, by having one of its prominent features singled out or abstracted, and brought under the root *DAR*, to tear, that the blurred image, left on the memory after repeated sensations, became known, became definite, received a handle for the purposes of thought and speech. And what was the result? The result was that with the name there arose in the mind, not a sensation, not an image—for think what such an image would have been—but what we call a concept, when we speak to ourselves without vibrations of the vocal chords, but what is called a word, when uttered aloud. If we distinguish, therefore, at all between concepts and words, we are bound to say that concepts are due to words, they are words *minus* sound, and not, as most philosophers will have it, that

<sup>1</sup> Taine, *De l'Intelligence*, i. p. 27.

words are due to concepts, that they are concepts *plus* sound. It is only because to think aloud is to speak, that to speak *sotto voce* may be called to think. All this was perfectly known, as far as the general principle is concerned. I believe that even Berkeley's ingenious views of general ideas might easily be translated into our language. He maintains that general ideas do not exist at all; so do we. He then proceeds to say that what we call general ideas are particular ideas with a word attached to them. So do we<sup>1</sup>, only that we have learned how this process took place. It could not be done by taking a sound at random and attaching it to a particular idea, for the simple reason that there were no such sounds in the market. But if Berkeley had known the results of the Science of Language, he would, I believe, have been perfectly satisfied with the process, as described before, of bringing one feature of the particular idea under a root, and thus raising that particular into a general idea at the same time that the root was raised into a word.

We could come to an understanding with Locke also, when he says that 'words become general by being made the signs of general ideas<sup>2</sup>!' if only he could be made to see that the same object which he has in view can be attained by saying that ideas become general by being signed with a word.

Nor should I despair of establishing a perfect agreement with M. Taine, if only he would leave the modern Parisian nursery and follow me into the distant caves of our Aryan ancestors. Nothing can be more brilliant than the way in which he describes

<sup>1</sup> *Science of Thought*, p. 259.

<sup>2</sup> *Loc. cit.*, p. 259.

the process of generalization going on in the mind of a child<sup>1</sup>. He describes how the nurse, on showing a dog to a child, says *oua-oua*, how the child's eyes follow the nurse's gestures, how he sees the dog, hears his bark, and how, after a few repetitions which form his apprenticeship, the two images, that of the dog and that of the sound, become, according to the law of the association of images, associated permanently in his mind. Thus, when he sees the dog again, he imagines the same sound, and by a kind of imitative instinct he tries to utter the same sound. When the dog barks, the child laughs and is enchanted, and he feels all the more tempted to pronounce the sound of the animal which strikes him as new, and of which he had hitherto heard a human imitation only. Up to this point there is nothing original or superior; the brain of every mammal is capable of similar associations. What is peculiar to man is that the sound associated by him with the perception of a certain individual is called forth again, not only by the sight of exactly similar individuals, but likewise by the presence of distinctly different individuals, though with regard to certain features belonging to the same class. In fact, analogies which do not strike an animal, strike man. The child says *oua-oua* at the sight of the dog belonging to the house. Soon he says *oua-oua* at the sight of poodles, pugs, and Newfoundland dogs. A little later the child will say *oua-oua* to a toy dog which is made to bark by some kind of mechanism, and this no animal would do. Even a toy dog which does not bark, but moves on wheels—nay, a dog made of bronze,

<sup>1</sup> Loc. cit., p. 245.

standing motionless and dumb in the drawing-room, a small friend walking on all fours in the nursery, lastly a mere drawing, will evoke the same sound.

All this is true, perfectly true; and M. Taine may be quite right in maintaining that the discoveries of Oken, Goethe, and Newton are in the end due to the same power of discovering analogies in nature. I follow him even when he sums up in the following words:—

‘To discover relations between most distant objects, to disentangle most delicate analogies, to establish common features in the most dissimilar things, to isolate most abstract qualities, all these expressions have the same meaning, and all these operations can be traced back to the name being evoked by perceptions and representations possessing the slightest resemblances, to the signal being roused by an almost imperceptible stimulant, to the mental word appearing in court at the first summons.’

With certain restrictions all these observations made among children of the present day apply with equal force to the children of our race<sup>1</sup>. When, for instance, such a word as *dru*, tree, had once been formed, supposing that at first it was meant for such trees only as could be peeled and smoothed and fashioned into some useful tools, it would soon be transferred to all trees, whatever their wood. After that it might become specialized again, as we see in Greek, where *δρῦς* means chiefly oak, and in

<sup>1</sup> See also L. M. Billia, *Due Risposte al Prof. Angelo Va'darnini intorno a una pretesa contraddizione fra la dottrina ideologica e la psicologica del Rosmini*. Torino, 1887, p. 14.

Lithuanian, where it means pine<sup>1</sup>. On the other hand, we see a word such as *oak*, after it had taken its definite meaning, becoming generalized again, and being used in Icelandic for trees in general.

With regard to all this I see no difference between M. Taine's views and my own, and I likewise fully agree with him when he explains how in the end every word, before it is used for philosophical purposes, has to be carefully defined<sup>2</sup>.

There is, however, some new and important light which the Science of Language has thrown on this old problem, and which, if M. Taine had taken it into account, would have enabled him, not only to establish his own views more firmly, but to extend them far beyond the narrow walls of our modern nurseries. The Science of Language has clearly shown that every word coincides from the very beginning with a general concept. While formerly the admission that thought was impossible without words was mostly restricted to general and abstract terms, we can now extend it to singular terms likewise, in fact to the whole of our language, with the exception of interjections and what are called demonstrative elements. That no one could think whiteness, goodness, or even humanity or brutality, was generally admitted, even by those who hesitated to admit that no thought was possible without language. But now that we can prove historically that even a tree could not have been named except as coming under the general term of tearing, peeling, shaping, or, in other cases, of feeding, sheltering, or growing, no wavering or haggling is any longer possible. All our words

<sup>1</sup> *Biographies of Words*, p. 258.

<sup>2</sup> Loc. cit., i. 39, 57.



are conceptual, all our concepts are verbal: this is what Nominalism postulated without being able to prove it, that is what Nominism has proved by means of the discoveries which a comparative study of languages has placed at our disposal, and which no scepticism can touch. From the first, Comparative Philology had no such ulterior objects in view. It confined itself to a careful collection of facts, to the analysis of all that had become purely formal, to the discovery of the constituent elements of language, to the establishment of the genealogical relationship of all members of the same family of speech; but beyond this it did not mean to go. When, however, some of the results at which Comparative Philology had arrived quite independently, were found to be almost identical with the teachings of some of the most authoritative philosophers; when it was found, for instance, that while Locke maintained that animals had no general ideas because they had no words, the Science of Language had arrived at the conclusion that animals had no words because they had no general ideas<sup>1</sup>, the Science of Language became *ipso facto* the Science of Thought, and language and thought were recognized once more as two faces of the same head.

The consequences which follow by necessity from this recognition of the identity of thought and language, and which I was anxious to put forward as strongly as possible in my *Science of Thought*, may, no doubt, have startled some philosophers, whose chief strength lies in the undefined use of words. But that theory itself could never have startled

<sup>1</sup> *Lectures on the Science of Language*, i. 65.

a careful student of the history of philosophy. It is a very old friend with a new face, and had a right to expect a different reception.

To the Greeks, we know, it was so natural to look upon language and thought as two sides of the same thing, that we can hardly appeal to them as conscious upholders of such a theory. As they used *logos* in both senses, as discourse, whether internal or external, their knowledge of the identity of language and thought came to them by intuition rather than by reflexion. They had never been led astray as we have been; hence they had not to discover the right way.

Still, whenever Greek philosophers come to touch on this question, they speak with no uncertain tone, though even then they are generally satisfied with stating the truth, without attempting to prove what, in their eyes, seemed hardly to require any proof—namely, the identity of language and thought.

In the *Sophist*, Plato begins by showing how language (λόγος) may be true or false, and only after having proved this, does he proceed to show that thought and imagination also may be true or false. For, he proceeds, 'thought (διάνοια) is the same as language, with this exception, that thought is the conversation of the soul with herself which takes place without voice, while the stream which, accompanied by sound, flows from thought through the lips is called language (λόγος).' He then defines opinion (δόξα) as the result of thinking (διανοίας ἀποτελείτησις), and imagination (φαντασία) as the union of opinion and sensation. In this way only, that is, by proving that thought, opinion, and im-

agination are closely akin to language, does he establish in the end that, as language has been proved to be either true or false, thought, opinion, and imagination also may be true or false.

Whether Plato could not have established the possibility of truth and falsehood in thought, opinion, and imagination by a simpler and shorter process, is not the question which concerns us here. What concerns us is the perfect assurance with which he identifies here, as well as in the *Theaetetus* (190)<sup>1</sup>, speech (λόγος) and thought (διάνοια), an assurance which seems to be shared by his latest translator, Professor Jowett, when finding fault with Hegel because 'he speaks as if thought, instead of being identical with language, was wholly independent of it<sup>2</sup>.'

Now, therefore, when it will hardly be safe to say any longer that the identity of language and thought is something quite unheard of, a paradox, a mere perversity (all these expressions have been used by men who call themselves philosophers, and even professors of philosophy), the next step will probably be to treat it as a mere question of words.

And, indeed, it is a question of words, but in the true sense of that word<sup>3</sup>.

<sup>1</sup> 'What do you mean by thinking?' 'I mean by thinking the conversation which the soul holds with herself in thinking of anything. . . . I say, then, that to form an opinion is to speak, and opinion is a word spoken, I mean, to oneself and in silence, not aloud, or to another.'

<sup>2</sup> Plato, iv. p. 420. Hegel, however, said: 'We think in names'; see *Science of Thought*, p. 45.

<sup>3</sup> 'Ein Wortstreit entsteht daraus, weil ich die Sachen unter andern Kombinationen sentire und drum, ihre Relativität ausdrückend, sie anders benennen muss.'—Goethe an Lavater, 1774.

If we use *thought* promiscuously for every kind of mental process, it stands to reason that to say that thought is impossible without language would be absurd. To feel pain and pleasure is an inward mental process, to see and hear are inward mental processes; to stare at the images of present and past events, to build castles in the air, to feed on such stuff as dreams are made of—all this might certainly be brought under the general category of mental activity. For ordinary purposes we need not be too particular about language, and, if people like to call all this *thinking*, why should we object? I, myself, when there can be no misunderstanding, use *thought* in that general sense, and use the word *mind* for all that is going on within us, whether sensation, perception, conception or naming<sup>1</sup>. I did not, therefore, put on my title-page, 'No thought without language,' but 'No reason without language,' and I did so after having defined reason as the addition and subtraction of conceptual words.

But though admitting this general meaning of *thinking*, we should carefully distinguish it from its more special and technical use, when it becomes synonymous with reasoning, and is, in fact, speaking *sotto* or *senza voce*. Whenever there is danger of misapprehension, it is decidedly better to avoid it by definition, but in most cases it is quite clear whether to *think* is used in its general or in its special sense. If, therefore, it is said that the question of the identity of thought and language is a mere question of words, I say, Yes, it is; but so is every question of philosophy, if rightly understood. Words are terms, and

<sup>1</sup> *Science of Thought*, p. 20.

only if rightly determined do they enable us to reason rightly. Let the word *thought* be rightly defined, and let the word *language* be rightly defined, and their identity will require no further proof; for, when we maintain their identity, we do not mean by language mere sound, nor do we mean by thought mere sensation or imagination, but knowledge of something that can neither be felt nor imagined, and can only be signified. We can never see nor can we imagine *tree, dog, man, triangle, polygon, parallelo-piped*, and all the rest of our dictionary. Then what are *tree, dog, man*, and all the rest? They are names (*nomina*=*gnomina*), that is, acts of knowledge, and of that peculiar class of knowledge which cannot possibly have anything corresponding to it in sensuous perception or imagination, because it has always reference to something which we discover in and lift out from percepts in order to signify whole classes of percepts, but never any real and individual percept. We can afterwards use these names, and say, for instance, this is a tree, this is a dog; but *tree* and *dog*, which we thus predicate, are general and abstract terms; they are not *the* fir-tree or *the* poodle dog which our sensation and imagination present to us.

I hope that, after this definition of the true meaning of language and thought, the usual result will follow, and that my critics will say that, if I meant no more than that, no one would think of differing from me, and that I have only myself to blame for not having made my meaning clear. I am quite willing to take that blame so long as I may agree with my adversaries quickly. If people will

only see what 'a question of words' really means, I believe there will soon be peace among all contending philosophical parties.

But, unfortunately, we think but too much in words, and almost let them think for us, instead of making them completely our own. We take our words as they come to us by inheritance, and we trust that other people will take them in the same sense in which we use them.

And yet nothing is more certain than that two people hardly ever take the same word in the same sense, and that just the most important words are often used in entirely different senses by different philosophers. Hence all our misunderstandings, all our quarrellings, all our so-called systems of philosophy, every one differing from the other, and yet all starting from the same given facts, all collected by the same eyes and the same minds!

If all philosophers used the same words in the same sense, their conclusions would differ as little as the conclusions of mathematicians. A mathematician knows exactly what is the meaning of the terms with which he operates, while philosophers will hardly ever condescend to define the terms which they use. We wonder why mathematicians always arrive at the same results, or, if they do not, why they can always discover the mistakes they have made. But how could it be otherwise? Even their highest problems, which completely stagger the unmathematical mind, consist in the end in nothing but addition and subtraction. Our reasoning also, even when it reaches the highest metaphysical problems, consists in nothing but addition and subtraction. What



else could it consist in? But there is this difference, that, while the mathematician adds and subtracts values which are defined within the strictest limits, the philosopher adds and subtracts values which are often not defined at all, or defined within the vaguest limits. If the metaphysician does not actually play with loaded dice, he often uses dice which he has never examined, and which, for all he knows, may have been marked rightly or wrongly by those who placed them in his hands. If all our words were defined as triangles, squares, and spheres are in geometry, or as 1.999 is in arithmetic, philosophy would soon become a worthy rival of mathematics.

The only hope of peace and of an understanding between various schools of philosophy lies in definition, and definition ought at the present moment to be the chief employment of all honest philosophers.

But we want more than definition—we want a thorough purification of language. A perfect language ought to be like a perfect alphabet. As in a perfect alphabet the same letter ought always to have one and the same sound, and the same sound ought always to be represented by one and the same letter, so, in a perfect language, the same word ought always to have one and the same meaning, and the same meaning ought always to be represented by one and the same word. I know all poets will cry out against this heresy, but I am speaking of philosophical, not of poetical, language.

Languages suffer from wealth even more than from poverty. The human mind is so made that it is always inclined to presuppose a difference of meaning where there is a difference of names. Because we

have a number of names to signify what is going on within us, such as spirit, mind, understanding, intelligence, and reason, philosophers have made every kind of effort to show how each differs from the rest, till we seem to have ever so many pigeon-holes within us, and ever so many pigeons hatching their eggs in them, instead of one undivided mental activity, applied to different objects.

While here confusion is due to too great a wealth of expression, we saw before how the employment of the word *language* in totally different senses, or poverty of expression, played equal havoc with our thoughts. If we can speak of the language of the eyes, of the language of silence, of the language of flowers, of the language of animals, no wonder that we forget altogether the distinctive meaning of language when used in the definite sense of expression of conceptual thought by conceptual words. Let this definition of language be granted, and ever so many books might have remained unwritten. We are all dealing with the same facts when we say that animals have no language, while others say they have language. We may go on for ever collecting anecdotes of parrots and jackdaws, we shall never come to a mutual understanding. But let language be once defined, and all wrangling will cease. If language is defined as communication in general, we shall all agree that animals have language. If language means human language, conceptual language, language derived from roots, then we shall all agree that animals have no language.

But it is not only in philosophy that we want a Katharsis of human speech ; it is wanted in every



sphere of human thought. Think of the different meanings attached to the word *gentleman*. From the most opposite quarters, from high and low, you hear the expression, 'He is a gentleman,' or 'He is not a gentleman.' If you venture to doubt, or are bold enough to ask for a definition of gentleman, you run a considerable risk of being told that you are not a gentleman yourself if you do not know what gentleman means. Yet the butler will call you a gentleman if you give him ten shillings instead of half a crown; your friends will doubt whether you are a gentleman if you indulge in that kind of menial generosity. And if there is this haze about the meaning of gentleman, think of the polychromatic iridescence that plays round the name of *lady*. The best we can do when we are asked to define that word is to say that it cannot be defined, and that to define means to destroy its charm, which can be felt only, but cannot be analysed.

If you wish to see a real confusion of tongues, you need not go to the plain in the land of Shinar, but read any article on art in any of our leading reviews. If you were to ask for a definition of almost any word used in these reviews, whether nice, sweet, charming, felicitous, exquisite, lovely, heavenly, or realistic, warm, throbbing, bewitching, killing, and all the rest, you would fare very badly. You would be called a pedant, or an ignoramus, and you would require no definition of what is meant by *these* words.

Look for a moment at political language. An eminent politician has lately spoken in rapturous terms about the name of Home Rule. He called it so delightful a term, so apt, so full of meaning. To

others it seems the most stupid word that has lately been invented, and exactly for the same reason—namely, because it is so full, so brimful of meaning. Define Home Rule, and if we do not all of us become Home Rulers at once, we shall at all events be able to compare notes, to arrive at a mutual understanding, and to find out what is practicable and what is not. Every individual, every home, every town, every county has a right to so much individual liberty, to so much Home Rule, to so much municipal freedom, to so much county government as is compatible with the vital interests of the commonwealth. All individual claims that clash with the welfare of the larger communities must be surrendered, some for a time, others in perpetuity. Home Rule in its undefined meaning is certainly brimful of meaning, but these words overflowing with meaning are exactly the most bewildering and the most misleading terms. Home Rule may mean liberty, independence, self-government, and a careful regard to local interests. In that sense we are all Home Rulers. But it may also mean licence, sedition, and selfishness—and in that sense, I hope, the number of Home Rulers is very small in the United Kingdom of Ireland, Scotland, and England.

But much more serious consequences may follow from a careless use of words. Politics, after all, are but a small section of ethics, and we have lately seen a complete system of ethics built up on the ambiguous use of the word *good*. No doubt, a knife, or a gun, or a house may be called good, if they are well adapted to cut, to shoot, and to shelter. We may also speak of actions as good or bad, not in a moral sense,

but simply as answering their purpose. A shot, for instance, may be called a good shot, if it is well aimed and well delivered, even though it should be the shot of a murderer. The first arrow which William Tell let fly at the apple on the head of his son was a good shot, but there was no moral element in it, because the father acted under constraint. But if he had wounded his son, and then, as he intended, had shot the second arrow at Gessler, that might likewise have been a good shot, in one sense, but, from a moral point of view, it would have been murder.

But to say that moral actions also are called good or bad according as the adjustments of acts to ends are or are not efficient, is mere jugglery with words. *Good* has two meanings, and these two meanings should be kept carefully apart. Good may mean useful, but good also means what is anything but useful or profitable; and it is goodness in that sense which moral philosophy has to account for. It is quite open to any philosopher to say that nothing should be called good except what is in some sense or other useful. But in that case the meaning of usefulness ought to be properly defined; we ought not to imagine that, because we use the same word, we are thinking the same thought. Now, how does our utilitarian philosopher define moral usefulness? He maintains that as the preservation and prolongation of our own life are our *summum bonum*, any acts conducing to this should be called good. Here many people would question the statement that preservation, and, more particularly, prolongation, of life beyond a certain term could always be called the highest good; but, even admitting this, we might indeed

call cannibalism useful, for the preservation and prolongation of life, but we should hardly call it good.

It is different when we come to consider the two other spheres of action in which we are told that any acts useful for the preservation and prolongation of life of our own offspring, and of our fellow creatures, should be called good.

Here we must again distinguish. Any act for the benefit of our own offspring may be useful, wise, and prudent, and, if well conceived and carefully carried out, may be called good, in one sense. But not till we know the motive, should we call it good in the other sense. In a primitive state of society children constituted the wealth and strength of a family, and to feed them and keep them from danger was no more meritorious than the feeding and keeping of slaves and cattle. From a purely utilitarian point of view, however, it would be useful, and therefore good, not to rear weak or crippled children, but to kill them, and here for the first time real goodness comes in. Real goodness is always, in some form or other, unselfishness. The unselfishness of a mother in bringing up a child that must always be a trouble and burden to her may be very misguided, anything but good in the eyes of those who interpret good as useful; but nevertheless, so long as the word *good* exists, it has always been applied to such acts.

In this case, however, the psychologist may still discover traces of selfishness in the natural love of a mother. But in the third sphere of action, in our endeavour to preserve and prolong the life of our fellow creatures, or, more correctly, in our endeavours



to promote their general happiness, we can easily distinguish between acts that ought to be called good, simply in the sense of useful, and acts that ought to be called good, in the sense of unselfish. A man who fulfils the general duties necessary for keeping a community together may be called a good, that is, a useful citizen. He is useful to society, but he is useful also to himself, as a member of that society. A man, however, who, like Marcus Curtius, jumped into the abyss in order to save Rome, may no doubt be called a fool by utilitarian philosophers, but the Romans called him good, and we too must call him unselfish. And a man who, like Gordon, remained at his post, trusting in his God and in his country, may be called a madman; but no one would dare to call him selfish, and posterity will keep for him a place of honour among the heroes, among the martyrs, among the good men of England.

Philosophers are perfectly justified in attempting to build up systems of ethics on utilitarian and hedonistic principles. We should not even contest their right to give a new definition of *goodness*, and to say that with them it shall mean nothing but *usefulness*. But they must not play with language, and tell us that what the world meant by *good* was never more than what they mean by *useful*. On the contrary, the word *good* was framed originally to signify acts which were not useful, nay, which might be detrimental to the agent, and which, nevertheless, require our approval. Their usefulness depends on the means which we employ, goodness on the objects which we have in view. We may call useful what is selfish, we can never call what is selfish good.

There is no sphere of mental activity which does not stand in need of the corrective influence of the Science of Thought. If soldiers must look to their swords, philosophers will have to look to their words. I know that here, as elsewhere, inquiry into the supply, and a vigorous test of the efficiency of words will be declared a nuisance, will be resisted and resented as an insult. But, in spite of all that, it will come, in some departments of thought it has already come, and in the future battles of the world good swords and good words will carry the day.

## CAN WE THINK WITHOUT WORDS<sup>1</sup>?

THE Duke of Argyll's article on the 'Identity of Thought and Language' in the *Contemporary Review* of December, 1888, though meant as an adverse criticism of the theory which I put forward in my *Science of Thought*, strikes me rather as a valuable contribution from a fellow worker than as the mere criticism of an opponent. Whatever his own opinion at the present moment may be, the Duke sees at all events that the question of the identity of thought and language has to be settled in one way or other, and that it cannot be waved aside as a mere paradox. To have had the benefit of the Duke's critical remarks is to me a matter of the highest importance. I know now the worst that can be said against my theory, and I know it as coming from a man who wears no philosophical livery and recognizes no scientific pope.

It may seem strange that on so simple and fundamental a question of philosophy as the true nature of language and thought there should be any difference of opinion at all. Even those who are not philosophers by profession think and speak, speak and think; and how is it possible that some should deny that they ever think without words, while others assert that they always or almost always think without words? Is not that enough to show that all philosophy is hope-

<sup>1</sup> *Nineteenth Century*, March, 1889.

less? We can understand that philosophers should differ about the interpretation of facts and the measuring of probabilities; but that they should disagree on the simplest facts of their own consciousness is enough to unnerve the most sanguine student of psychology. If, for instance, the brain of the gorilla strikes one observer as very like that of a man, it may be said with perfect honesty that such likeness is no real likeness, and that an almost inconspicuous structural difference may have been the primary cause of the immeasurable and practically infinite divergence of the human from the simian stirps. If, on the contrary, the brain of the gorilla strikes another observer as very different from that of a man, it is equally justifiable, for the sake of argument, to point out that such difference is no real difference, and that the difference in weight of brain between the highest and the lowest man is far greater, both relatively and absolutely, than that between the lowest man and the highest ape.

Much more, in cases where we have to deal with probabilities only, divergence of opinion and even flat contradiction are perfectly compatible with scientific honesty. Thus the possibility of 'an extinct species (or genus) of ape which did give origin to man' is still held almost as an article of faith by a number of eminent biologists, while it is rejected, as, in the present state of our knowledge, entirely unscientific, by others whose learning and honesty have never been questioned even by their opponents, and who would hail the discovery of the so-called 'missing link' with even greater satisfaction than Darwin himself.

All this is perfectly intelligible. But that there



should be difference of opinion—nay, flat contradiction—on such a question as whether a human being, that is, whether we ourselves, can think without words or not, seems almost unintelligible. There can be no new evidence forthcoming on such a subject. We know all that can possibly be known, and who could be a better judge than the speaker and the thinker himself? Can we not all of us perform the only possible experiment by which the truth of such a statement can be tested, and perform it whenever we like, without the aid of any apparatus or chemical laboratory? Can we not simply ask ourselves or our friends to try to speak without thinking, or to think without speaking? And what other crucial test can possibly be required?

Now, if we ask our friends to try to speak or even to write, without thinking, some of them will no doubt achieve it with great success. They will chatter, prattle, jabber, babble and gabble, but unless they at the same time understand by their chatter something which we also can understand—that is, unless they think—no one would say that they are speaking, in the true sense of that word. No language can be said to be spoken unless every word of it is meant to be understood, otherwise we might say that a parrot speaks, or that even a phonograph speaks.

But, if we ask our friends to try to think without speaking, what will they say? I know that some will say they can do it with the greatest ease; but we have only to ask them whether they really know what exactly they are thinking about, and the illusion will vanish at once. As soon as they become conscious of their thoughts, or even of their images or dreams,

as soon as they can tell themselves or others what they are thinking about, the forgotten or muffled words are there at once, and thought, as soon as it becomes conscious, becomes worded.

'Yes,' I am told, 'it may seem so to you. But that is simply because you are so much absorbed in the study of language that you have forgotten how to think without words.' Now Mr. Galton has shown that it is 'an obsolete error to believe that the minds of every one else are like one's own,' and he tells us that he at all events has no difficulty whatever in thinking without words. Those who cannot think without words should therefore try to bear their misfortune as well as they can, without imagining that everybody also is afflicted with the same complaint.

If Mr. Galton tells me that he can think without words, I am not so rude as to contradict him in a matter of his own self-consciousness. But with regard to what he calls the obsolete error of believing that the minds of every one else are like one's own, I must confess that I cling to it so tenaciously that if I thought I could ever give it up, I should long ago have thrown up the whole study of psychology as a snare and delusion. For we are not speaking here of mere idiosyncrasies or oddities or freaks of nature, but of the fundamental framework of our mind; and to maintain that one mind is built up with words and another with thoughts seems to me much the same as to assert that some vertebrate animals have vertebræ, but that other vertebrates can dispense with them as superfluous.

Nothing, however, can be gained by flat contradiction, particularly when the matter in dispute can be reached by our inner consciousness only. I think

I know very well what Mr. Galton means by his thoughts without words, and I do not despair at all that by-and-by we may come to some understanding on the subject, if only we try to express our thoughts in language, and, if possible, in one and the same philosophical dialect.

It was from the same feeling that in matters of self-consciousness it is hardly courteous to contradict any one, that I did not wish to deny the possibility of what was asserted by other philosophers. While fully admitting that thought, in the proper sense of that term, was impossible without words, they maintain that at all events it was perfectly possible to have images without words. In this case we must try to make it quite clear, first of all, what we mean by images. When we distinguish, according to the ordinary philosophical phraseology, between impressions, sensations, percepts, and concepts, it is clear that images fall under the head of percepts. We may subdivide our perceptual images into ever so many classes, but what they all share in common is that they are the result of a change of purely subjective sensations into objective images<sup>1</sup>. Strictly speaking, imagination would be confined to our dealing with such images, but its meaning has been extended far beyond. Taking image in the sense of percept, I, for my own part, am perfectly convinced that no image is possible without a name. Professor Helmholtz (no mean authority on such matters) has arrived at the

<sup>1</sup> 'Avec beaucoup d'autres nous appelons *percept* le produit de la perception, c'est-à-dire les *images* de l'objet extérieur définitivement acquises et liées à la sensation excitatrice.'—Binet, *La Psychologie du Raisonnement*, p. 66.

same conclusion. But again, I do not wish to contradict my friends when they tell me that they are capable of anonymous imagination, so long as by anonymous they do not mean unnamed or unnameable imaginations, but simply imaginations which for the time being seem to them without a name. If I hold that an image, in order to be an image of something, must have a name, it is simply because every something is something to us only after it has been named or signed by some *nota* or other.

Let us examine a case in point mentioned by the Duke of Argyll. 'Images,' he says, 'are repetitions of a sensation, endowed with all its mental wealth, and consciously reproduced from the stores of memory. Both in their own nature, and in this very work of reproduction, all true imagery is bathed in the light of concepts. Hence it is that without images we can do nothing in the field of thought, whilst, with images, we can mentally do all things which it is given us to do. The very highest and most abstract concepts are seen and handled by our intellects in the form of voiceless imagery. How many are the concepts roused in us by the forms, and by the remembered images, of the human countenance? Love and goodness, purity and truth, benevolence and devotion, firmness and justice, authority and command—these are a few, and a few only, of the abstract ideas which may be presented and represented to us, in every degree and in every combination, by the remembered image of some silent face. . . . And if we can think of these images, and of all they suggest, without the intervention of any word, and without hearing, even in imagination, a single sound, we may be sure that

the very highest concepts, the most generalized and the most abstract, are separable from language and independent of it. . . .'

Now let us examine this eloquent passage a little more closely. We all can enter into the Duke's feelings when he speaks of harbouring the image of a face which is the noblest embodiment of the divine virtue of compassion. We also know that this may be done in perfect silence, and without a tremor of the vocal chords. But can we have a concept of compassion without ever having named it? Even the most decided antagonists of the theory of the identity of thought and language admit that we could not have such general concepts as whiteness without first having named them. And does not the same apply to such concepts also as 'divine virtue,' 'embodiment,' 'image,' and 'face'? There are languages which have not even formed a name for face, and people speaking and thinking such languages would find it extremely difficult to imagine a face as distinct from the whole head. Speaking of the Emperor Nicholas of Russia, the Duke of Argyll says that he was the most splendid specimen of the *genus homo*, and that the association of augustness might well be united with his image. 'But,' he continues, 'in none of these cases do the associated concepts require any remembrance of the name of the man. It is not round a word—which may be, and often is, forgotten—but round an image that the glory shines.'

Here again, who would deny that we might well forget the name of Nicholas and yet have an image of the Emperor of Russia? We might even forget the name of Russia, and the name of emperor. But

how could we recall and fix his image except by some kind of name, even if it were no more definite than that of 'a specimen of the *genus homo*'?

And here the Duke, who, if he is anything in his arguments, is honest to himself, admits really all I want. 'The mere name,' he says, 'is of no other use than of recalling the image.' But that, surely, concedes all I want. 'Yes,' the Duke replies, 'but the name is by no means absolutely required for this end. Because this may be accomplished as well or even better, not only by the higher arts of sculpture and painting, but sometimes even by the more primitive resources of mimicry or of gesture.' Now this also is exactly what I have myself said again and again about language<sup>1</sup>. Instead of phonetic language, we might have had picture-writing and hieroglyphics. Instead of phonetic language, many races even now use pantomime and gestures. All we want is some kind of sign or *nota* or *nomen* by which to know our image or percept. It may be a mere accident that phonetic signs prevailed and survived, but anyhow it is a fact that they did; and if the Duke admits that sculpture, painting, mimicry or gesture, or something like them, might be employed to recall our images, why is he so unwilling to admit that, as things are, no image is ever recalled unless it has first been called by its own name or represented by some sign more or less appropriate?

<sup>1</sup> 'I need hardly say that when I speak of words I include other signs likewise, such as figures, for instance, or hieroglyphics, or Chinese or Accadian symbols. All I maintain is that thought cannot exist without signs, and that our most important signs are words.'—*Three Introductory Lectures on the Science of Thought*, delivered at the Royal Institution, London, by F. M. M., p. 58 (Longmans).

In spite of many painful experiences hitherto, I cannot bring myself to believe that, on so fundamental a question as the identity of thought and language, it should really be impossible for honest disputants to arrive at any agreement; that we must in fact accept Mr. Galton's teaching, that is to say, bring ourselves to believe that our minds are differently made, or, in plain language, that either we ourselves or our opponents must be slightly demented. Some of my critics seem indeed to imagine that they have found a way out of this dilemma. The remedy which they suggest is one that has proved a panacea for so many evils that they hope it may still turn out to be the true philosopher's stone. If everything else can be settled by majorities, they say, why not philosophical truth? Let us count who is in favour and who is against this or any other theory, and let the minority be taught that they must submit to this verdict.

It would seem as if even the Duke of Argyll was not altogether averse to such a philosophical ordeal. He quotes my own words that nearly all my critics have hitherto treated the theory of the identity of language and thought as a complete novelty or a mere paradox. It amused me, and it no doubt served some wicked purpose of mine to point out how many critics, professional or unprofessional, had, on the first appearance of my book, shown themselves utterly ignorant of the fact that this question was really one of the best discussed problems of philosophy, and had been threshed out in all ages and in all countries where philosophy had become a scientific study. But if the Duke of Argyll had looked at the numerous reviews

of my *Science of Thought* which have since appeared, he would hardly have said that *all* my critics are against me, and that, as I stand in a minority of one, I ought to surrender. The tide began to turn as soon as Sir James Stephen published his two powerful articles in this Review, and at present that tide is running its regular course. At first the theory of the identity of thought and language was greeted by a whole chorus of reviewers as simply absurd. Afterwards the whole book was supposed to be so full of heresy and so outrageous that a well-known representative of the new Oxford school of philosophy is said to have judged it very wittily by the number of its pages (667), *one more than the number of the Beast!* Then came the articles in this Review by Sir James Stephen, showing that this so-called philosophical heresy was the truth and nothing but the truth, and now we have actually reached the point where what was at first called a paradox is called a simple truism by no less an authority than Mr. Romanes. The American papers have a very clever way of advertising. They print not only, as publishers do in England, the best that has been said by the author's friends, but likewise the worst that has been said by his enemies. In these American 'Press Notices' I still see the extract from the *New York Science*, 'the absurdity of the theory is manifest'—coming from an unnamed, though by no means nameless American critic; but the majority of opinions is decidedly in an opposite direction, and whether votes are counted or weighed, I should no longer be afraid of finding myself in a disgraceful minority.

But, whatever others may think, I must confess



I much prefer to be in a minority whenever the discovery of a new truth is concerned. There seems to me no excuse for being a philosopher at all if we cannot face being in a minority of one. Every philosopher, if he is worthy of the name, must be at times an *Athanasius contra mundum*, and he who has never been so has really no *raison d'être*.

Instead, therefore, of appealing once more to 'my predecessors,' I shall try whether I cannot make a convert of so illustrious an opponent as the Duke of Argyll. I do not despair of it, for, first of all, I have watched the Duke's literary activity for many years, and I have never detected him as merely wrangling for the sake of victory. He has strong convictions and knows how to defend them, but he never condescends to that miserable forensic eloquence which is the curse of modern fashionable science. Nor is it so conceited on my part as it may seem if I express a hope that I may possibly persuade the Duke to see the truth of my theory. From his very first letter in *Nature*, where he simply expressed his dissent, I gathered that he saw the real bearing of my argument far more clearly than most of my opponents. 'Language,' he said, 'seems to me necessary to the progress of thought, but not at all necessary to the mere act of thinking.' Now this remark, if properly interpreted, contains the whole gist of my argument. I suppose the Duke would not object to my adding that language is necessary to the origin as well as the progress of thought, for, if necessary for the progress, it could hardly be dispensed with for the earlier stages of that progress and for what we may call the origin of thought.

But the Duke admits even more than this. 'Thought and language,' he writes, 'are inseparable for all purposes connected with the communion of thought from one mind to another. And these purposes include all conversation and all literature. That is to say, they are inseparable for all purposes of life, including the whole growth of mankind in knowledge.' 'Surely,' he adds, 'this is a concession on a matter of fact which ought to be large enough to satisfy even Professor Max Müller.'

And so it is. There are indeed philosophers who maintain that language would never have arisen but for the purpose of communication with our neighbours, and that it has no other object but conversation. This, however, is so clearly self-contradictory that I cannot avail myself of their support, and maintain with them that if in conversation language is inseparable from thought, it is so altogether. Surely, before we can communicate, we must have something to communicate, and this we must elaborate for ourselves.

But if it is once admitted that every progress in advance, every addition to our conceptual wealth, every step in the conquest of truth, proves the inseparable character of language and thought, I am quite satisfied, and I thought I had myself made this as clear as it could be made. 'It is difficult,' I wrote, 'to guard against misapprehensions which one can hardly realize as possible. How could I hold pronunciation necessary for thought, when I am perfectly silent while I am writing and while I am reading? How could I believe in the necessity of a silent rehearsing of words, when one such word as "there-

fore" may imply hundreds of words or pages, the rehearsing of which would require hours and days? Only, as we cannot remember or imagine without having first seen or heard something to remember, neither can we inwardly speak without having first named something that we can remember. There is an algebra of language far more wonderful than the algebra of mathematics. . . . Thinking is nothing but speaking *minus* words. We do not begin with thinking and then proceed to speaking, but we begin with naming, and then, by a constant process of addition and subtraction, of widening and abbreviating, we arrive at what we call thought. . . . How words are framed, the science of language has taught us; how they are reduced to mere shadows, to signs of signs, apparently to mere nothings, the science of thought will have to explain far more fully than I have been able to do.'

I could go on quoting page after page to the same effect, but I admit that, by taking a sentence here and another there, and separating them from the context, I can be made to say that we can never think without words, which is supposed to mean without pronouncing or muttering words. But we are not in a Court of Law, where every unguarded expression may be turned against an adversary. And how could any attentive and unprejudiced reader fail to see what I meant when I defined thought as language *minus* sound? I know quite well that in one passage I remarked that even in this silent language we may sometimes observe involuntary movements of the vocal chords and of the muscles required for the pronunciation of consonants, which we do not mean

to pronounce; but this was simply in order to show the power of habit and to confirm by indirect proof the former working of thought by means of real words.

Let me, then, once more try to make it clear by a strictly analogous case what I meant by saying that thought was impossible without language, or that thought and language were inseparable. Suppose I were to say that shorthand was impossible without hieroglyphics, or that shorthand and hieroglyphics were inseparable, should I be right or wrong? I should be wrong, no doubt, in the eyes of every practical shorthand writer; in fact, most reporters would probably exclaim, with the writer in the *New York Science*, 'the absurdity of the theory is manifest.' But for all that, historically, I should be perfectly right, for there is an unbroken chain between our phonetic alphabet and the Egyptian hieroglyphics, and without our phonetic alphabet, shorthand would have been impossible. Our F is the hieroglyphic cerastes, our H the hieroglyphic sieve, our L the hieroglyphic lion, and so on. We may even go a step farther and say that without an original stratum of hieroglyphics or ideographs, followed by strata of determinative and of syllabic signs, no phonetic alphabet whatever, not even Visible Speech, would ever have arisen. There is, no doubt, one very well-known exception. A negro who had watched missionaries writing and reading, invented a syllabic alphabet of his own, an alphabet therefore which had apparently no ideographic antecedents. But whence did he get the idea of writing, of picturing sounds, and of sound- ing pictures? Only from those who handed down the

tradition from the earliest pyramids to the latest mission-stations in Africa<sup>1</sup>.

Is it not the same in language? After we have once named and framed a concept, we can forget its sound quite as much as we forget the cerastes in our F, or in the shorthand *f*; but without some kind of cerastes there would never have been a shorthand *f*, and without a name for dog as different from all other quadrupeds, there would never have been a canine concept in our silent mind, to say nothing of the concept of compassion which those who can read may discover even in the features of a collie dog watching his dying master.

But then the Duke of Argyll might say that all this, on the contrary, would prove separability of thought and language, inasmuch as we can no longer discover a lion in our L or a cerastes in our F. Against this misapprehension, however, I thought I had guarded from the first by using the well-known Hegelian phrase of *aufgehoben*. In our trains of thought the words may indeed vanish, but their former presence continues to be felt, nay, it exists

<sup>1</sup> In the same way we have heard lately a great deal about children who have invented a kind of baby-language of their own without any antecedent roots. My learned friend, Mr. Horatio Hale, has given us some most curious information on the whole subject. But to imagine that this invention of a baby-language can in any way explain the real historical origin of language is like imagining that the invention of the negro syllabarium can help us to explain the origin of the Egyptian hieroglyphics. A child in our nineteenth-century nurseries—which, as soon as it can hear anything, hears language used all around, sees the effects of it, learns words ready made, like a parrot, without at first even understanding them—is about the worst illustration of the origin of language that could well be chosen. We might as well make magnetic observations with steel spectacles on our nose!

even when it has ceased to be felt. They are absorbed, not taken away. If therefore the Duke will only admit that 'thinking is speaking *minus* words,' this *minus* always implying the former presence of words, there remains no real difference between us.

I may sum up the whole of this part of the argument by *Nihil in intellectu quod non antea fuerit in lingua*, though I always add the proviso of Leibniz, *nisi ipse intellectus*. If it has once been admitted that we cannot think without words, or, to put it more clearly, without the former presence of words, the next conclusion also will probably be accepted, namely, that 'we do not begin with thinking or so-called *ideation*, and then proceed to speaking, but that we begin with naming, and then, by a constant process of addition and subtraction, of widening and narrowing, arrive at what we call thought.' It is difficult to free ourselves from the prejudice that thought is something much more sublime than language, and many philosophers would resist even the admission that thought is language sublimed. And yet what else can the elements of thought be, if not words, the embodiments of concepts? And what can we do with them except to combine or to separate them?

But when I quoted the words of Hobbes that all the operations of our mind can be reduced to addition and subtraction, the Duke is again shocked, and tells us that this is a mere attempt to get rid of mystery. Now, to attempt to get rid of mystery is surely something very laudable; it seems to me the very essence of philosophy. But if addition and subtraction sound

too homely, let us say instead, synthesis and analysis, or induction and deduction, and then I ask again, what can we do with words, or the elements of thought, except to treat them synthetically and analytically? how can we reason except either inductively or deductively? Is the simple and intelligible really less sublime than the complicated and the mysterious? To me it has always seemed that nothing is more wonderful than the simplicity with which all our intellectual operations are carried on. So long as language seemed something mysterious and incomprehensible, it might interest the poet and the theologian, but it had no attraction for the philosopher. But when, in the light of comparative philology, language had become transparent, then its very simplicity raised our admiration to real amazement. To the Greeks the invention of letters seemed so surpassingly marvellous that a god only could be conceived to have made it. To us, who have been enabled to watch the historical progress from hieroglyphic pictures to phonetic signs, the invention of the alphabet has become a far greater wonder by its very naturalness. There remains mystery enough in this world of ours without our trying to retain the veil when philosophy has withdrawn it, and has revealed to us greater wonders than were ever painted by ourselves on the outer curtain.

It is quite true that, when the identity of language and thought is once admitted, many fictions will go which formerly seemed to us essential. We shall then have to ask what philosophers mean by the multiplicity of human faculties with which they fill their volumes of psychology. We shall have to ask what

they mean by mind as distinct from its operations, what by self-consciousness, and last, not least of all, what they mean by self. This may lead, as has been rightly said, to an evolution and revolution in all philosophy; but, if it does, where is the harm? The science of language can only clear the ground, and it has removed during the last fifty years mountains of rubbish which had accumulated during centuries. It has opened vistas of speculation of which Plato, Descartes, and Kant had no suspicion. I need not say this to the Duke of Argyll, who, more quickly than anybody else, perceived that 'human speech is the sure record of the deepest metaphysical truths.' It is now for the students of philosophy to bring to light 'the profound but unconscious metaphysics of human speech,' and no one could bring to this task a more open mind, a more steady look, and a more judicial temper than the Duke of Argyll.

I wish I could end here and await the Duke's reply. But there is one passage in his article which I cannot allow to pass unnoticed. It seemed to me not only natural, but almost imperative, when I saw the theory of the identity of language and thought treated by so many of my reviewers as an unheard of novelty, that I should show how it had occupied the minds of nearly all the foremost representatives in the evolution of philosophic thought from Plato down to Hegel. It was for that reason that I wrote the article 'My Predecessors.' I could not possibly give in it whole pages of extracts from even the small number of philosophers whom I quoted, but I thought I had given in each case enough to show that those whom I quoted had deliberately either accepted or



rejected that theory. The Duke of Argyll remarks on this article: 'Professor Max Müller appeals from the living to the dead.' Surely not altogether; for M. Taine, Professor Noiré, Professor Jowett, and Sir James Stephen are still, I am glad to say, among the living. The Duke continues: "My Predecessors" is the significant title of the interesting paper in which he quotes a whole list of illustrious thinkers—writers whose language, he says, sustains his theory. But does it? There are many senses in which we can speak without substantial inaccuracy of thought and language as at least inseparable. They are inseparable for all purposes connected with the communication of thought from one mind to another. And these purposes include all conversation and all literature.'

I doubt whether the Duke could have read very carefully what I had written on this subject. My very first witness was Plato, and he takes particular care to say that he is not speaking of conversation with others, but of the conversation of the soul with itself. 'What do you mean by thinking?' he says, and he replies, 'I mean by thinking the conversation which the soul holds with herself in thinking of anything. I say, then, that to form an opinion is to speak, and opinion is a word spoken, I mean, to oneself and in silence, not aloud or to another.' How can the Duke say that this refers to conversation with others, or call this straightforward statement 'a merely general and metaphorical expression'? The latest translator of Plato, Mr. Jowett<sup>1</sup>, at all events does not think so, for he actually finds fault

<sup>1</sup> *Plato*, translated by B. Jowett, iv. p. 420.

with Hegel because 'he speaks as if thought, instead of being identical with language, was wholly independent of it.' Another translator of Plato, Schleiermacher, uses even stronger language, which certainly cannot be called general and metaphorical. 'Thinking and speaking,' he says, 'are so entirely one that we can only distinguish them as internal and external, nay, even as internal, every thought is already a word.' If Schelling said, 'Without language it is impossible to conceive philosophical, nay, even any human consciousness,' can we interpret this as referring to social intercourse only? If Condillac said, '*Nous ne pensons qu'avec les mots*,' did he really utter this oracular saying in the sense of '*Nous ne parlons qu'avec les mots*'? Can De Bonald's declaration that 'language is the necessary instrument of every intellectual operation'; can De Maistre's opinion that 'thought and language are two magnificent synonyms, and that our intellect cannot think, or know that it thinks, without speaking'; can Mansel's reiterated statements that 'language is inseparable from thought, that man must think by symbols, and, as a matter of fact, thinks by language,' — can all these, I ask, be interpreted away so as to convey no more than, what surely wanted no very elaborate proof, viz. that we cannot speak to others without pronouncing certain words?

So far from claiming the support of doubtful adherents, I really left out several names which, by some little pressure, I could have marshalled as supporters of the theory of the identity of thought and language. I spoke of the late Professor Green as a doubtful adherent only, because in one passage he

says no more than that 'it is hard, some say it is impossible, to think without expressing thought in language.' But, to judge from another passage in an essay of his on 'Faith' (p. 9), he seems himself to have belonged to those who thought it impossible, for he says, 'Thought first becomes definite in language.' Even Descartes might have been called as a witness for the defence, for though he has not treated the problem of the identity of language and thought in any special essay, his arguments in support of language being the Rubicon between man and beast, constantly imply that he considered real thought impossible without language<sup>1</sup>. Nothing remains therefore but to wait till the Duke of Argyll will point out those among 'my predecessors' whom I have no right to place in my own philosophical pedigree. I should be sorry to have to part with any one of them, but I may remark that I never appealed to them because I thought that my argument required to be supported by authority. I appealed to them because I was surprised that so many of my critics should have so far forgotten their history of philosophy as to call the identity of language and thought a brand-new heresy, and still more because by showing that

<sup>1</sup> 'Il n'y a aucune de nos actions extérieures qui puisse assurer ceux qui les examinent que notre corps n'est pas seulement une machine qui se remue de soi-même, mais qu'il y a aussi en lui une âme qui a des pensées, *excepté les paroles*, ou autres signes faits à propos de sujets qui se présentent, sans se rapporter à aucune passion.'—*Œuvres de Descartes*, par Victor Cousin, ix. p. 724. These letters of Descartes, though now put aside as mediaeval, might be read with great advantage by those who still try to throw lofty, but very unsafe, suspension-bridges across the Rubicon of language.

this theory was by no means my own child, I felt at greater liberty to speak of it with all the enthusiasm of an apostle. My own argument in support of it, chiefly based on the new discoveries of the Science of Language, must fall or stand by itself, and so far as I am able to judge, it shows no signs of falling yet. I still hope that even the Duke of Argyll will see that what he thought its weak points are stronger than he imagined, and I know that if he honestly can, he will follow the example of others whose former antagonism has been changed into hearty support.

## ON THOUGHT AND LANGUAGE<sup>1</sup>.

IT seems impossible to many people to look upon language as anything but an instrument of thought. In one sense this is perfectly true. We think by means of words, just as we see by means of eyes, and hear by means of ears, and walk by means of legs. But could we walk without our legs, or see without our eyes? We can walk with artificial legs, no doubt, and so we can think and speak in foreign languages, and in every kind of artificial sign-language. But as artificial legs presuppose natural legs, foreign and artificial languages presuppose our own natural language.

When we speak of instruments we mean generally such things as knives with which we cut, or pens with which we write. They are instruments which are useful, but they are not indispensable, and can be replaced by other instruments. This does not, however, apply to eyes, ears, or language, and in order to mark that distinction the former are generally called instruments, the latter organs.

Now, if we call language the organ of thought, we, no doubt, admit that we can distinguish between the *organon*, that which works, and the *ergon*, i.e. the work which it performs. But it does by no means

<sup>1</sup> A Lecture delivered before the Philosophical Society of Glasgow, on Jan. 21, 1891.

follow that therefore the *ergon* could ever exist without the *organon*. We can easily distinguish between the act of spoken thought and the organ of spoken thought, but it does by no means follow that therefore the act of spoken thought could ever exist without the organ of spoken thought.

It may seem unfair in this argument to call thought 'spoken thought.' It looks like begging the whole question. But it really is not so. By calling thought 'spoken thought,' we only supply a deficiency of our modern languages. If we were Greeks, we should use the simple word *Logos*, and instead of begging the question, we should show that our proposition is really self-evident, or, it may be, even tautological, namely that *logos* is impossible without *logos*.

Here we can see at once how intimately thought is connected with language, how it is dependent on it, or, more correctly, how inseparable the two really are. If, like the Greeks, we had a word such as *logos*, we should probably never have doubted that what we call speech and thought are but two sides of the same thing. And the same lesson is taught us again and again, if only we are inclined to listen to it.

Suppose we had no such word as *matter*, would not our whole system of thought be different? Matter is not an object, perceived by our senses. We may even go further and say that matter by itself never exists. This or that matter exists, chemical substances, say, gold or silver, oxygen or hydrogen, exist; but matter, which some philosophers look upon as the most certain and concrete of all things, is simply an

abstraction, something that may be predicated of many things, but that is never found by itself in *rerum natura*.

Some people define matter as what is ponderable and impenetrable, but here again, nothing exists that is simply ponderable, or impenetrable. It is always something else; it is iron, wood, stone, vapour, gas, but never matter, *pur et simple*.

It is clear, therefore, that matter is made by us, and that without some such word as matter, we could never have the faintest idea or concept of matter. For how should we call it? On the other hand, it is equally clear that we could not have the word matter, without the concept of matter. Matter would be mere smatter, a bundle of six letters, of no use for anything. Now, what follows from this apparent dilemma? If the concept cannot be prior to the name and the name cannot be prior to the concept, they must needs be simultaneous, or, more correctly, they must be the same thing under two aspects.

From an historical point of view, that is, if we consider the genesis of words and concepts, not in modern times, but during that period when words and concepts were framed for the first time, we are bound to admit that the word is really the *prius*. That period may be ever so far distant, but it was nevertheless a very real and truly historical period.

How did man arrive at such a word as matter? The word itself tells its own story. It came to us from French, it came into French from Latin. In Latin *materies* or *materia* still means wood and timber, though it has also assumed the meaning of matter, like the Greek *ύλη*, which means both wood

and matter. The process by which *materies* came to mean matter is clear. If *materies* meant originally the wood out of which a hut, a table, a chair, or a stick was made, it was naturally applied to other substances also, such as stone, bricks, or metal when used in the making of huts, tables, chairs, or sticks. In the same way we speak of a pen, i.e. a quill, though we mean a steel pen.

When the original special meaning of wood thus disappeared, there remained only the meaning of building material, material, and, at last, of matter and substance. We say now, What is the matter? What does it matter? but we little think of the solid beams out of which such expressions were hewn and fashioned. In this sense, therefore, we may say that historically the word *materies* came first, meaning a beam, and that gradually it shed its various attributes, one after the other, till there remained nothing but its trunk, and that is what we now mean by matter.

Here, therefore, we see the process of generalization, which is very important, particularly in the later periods of language and thought.

But it is the greatest mistake to suppose that language, such as we know it, what we might call historical language, always begins with the particular and then proceeds to the general. Adam Smith was one of the ablest defenders of the theory that the *Primum Cognitum* and the *Primum Appellatum* must have been the particular. But all the facts of language are dead against this theory. And yet, that theory has once more been put forward by a philosopher who prides himself on nothing so much as that his philosophy rests throughout on positive facts.



I do not blame a philosopher who is ignorant of the results obtained by the Science of Language, so long as he abstains from touching on the subject. But constantly to appeal to language, and yet to ignore what has been achieved by comparative philologists, is unpardonable. No one is a greater sinner in that respect than Mr. Herbert Spencer.

When speaking of the process by which the abstract idea of colour was formed, he says<sup>1</sup>: 'The idea of each colour had originally entire concreteness given to it by an object possessing the colour; as some of the unmodified names, such as orange and violet, show us. The dissociation of each colour from the object specially associated with it in thought at the outset, went on as fast as the colour came to be associated in thought with objects unlike the first, and unlike one another. The idea of orange was conceived in the abstract more fully in proportion as the various orange-coloured objects remembered, cancelled one another's diverse attributes, and left outstanding their common attribute. So it is if we ascend a stage, and note how there arises the abstract idea of colour, apart from particular colours.'

Now this is all untrue. Such names as orange and violet are some of the latest names of colour. They presuppose such late, nay exotic, concepts, as *orange* and *violet*. The question why an orange was called an orange, and a violet a violet, remains unasked and unanswered. In the old names for *black*, *white*, *red*, *green*, and *blue*, there is not a trace of ink, or snow, or blood, or sea, or sky. They are all derived, so far as we can analyse them at all, from roots

<sup>1</sup> *Data of Ethics*, p. 124.

meaning to shine, to grow, to beat black and blue, and not from oranges, roses, or violets.

Again, what can be the meaning of such a sentence as <sup>1</sup>: 'Words referring to quantity furnish cases of more marked dissociation of abstract from concrete. Grouping various things as small in comparison either with those of their kind or with those of other kinds; and similarly grouping some objects as comparatively great, we get the opposite abstract notions of smallness and greatness.' Does Mr. Spencer really believe that we can call things small and great, that our language can possess two adjectives expressive of these qualities, and that yet at the same time we are without an abstract notion of smallness and greatness? Mr. H. Spencer constantly calls on the facts of language to confirm his views, but his facts are hardly ever correct. For instance: after having explained that, according to his ideas, greater coherence among its component motions broadly distinguishes the conduct we call moral from the conduct we call immoral, he appeals to the word *dissolute*, when meaning immoral, as proving this theory. But *dissolutus* in Latin meant originally no more than negligent, remiss. *Dissolutio* meant languor, weakness, effeminacy, and then only licentiousness and immorality. Language, therefore, in no way confirms Mr. H. Spencer's speculations, still less does experience, for no man is so coherent in his acts, so calculating, so self-restrained, as the confirmed criminal; no one is often so careless, so little shrewd, so easily duped, as the thoroughly moral and therefore trustful and confident man.

<sup>1</sup> L. c., p. 125.

But to return to the history of the word for matter. The process by which *materies*, wood, came to mean matter, is intelligible enough, whether we call it generalization or abstraction. But how came *materies* to mean wood? That is the question which has to be solved, and in solving it, we shall find that while in the second period of thought-language the progress is from the particular to the general, the progress in the first period is the reverse, namely from the general to the particular. In the case of *materies* this is very clear. No one can doubt that in *materies* the radical element is *mā*, the derivatives *ter* and *ies*. The radical element *mā* is found in Sanskrit *mā-tram*, measure, *mā-nam*, measuring, *mā-na-s*, a building; in Greek μέτρον, measure; in Latin *metare*, to measure. We can hardly doubt that the oldest Aryan name for mother also, namely *mātar*, Greek μήτηρ, Latin *mater*, English *mother*, is derived from that root, though it is doubtful in what sense. It may have meant originally no more than maker or fashioner, and it is important to observe that in the Veda the same word *mātar* occurs as a masculine and means maker, and actually governs an accusative. But it may also have meant arranger, controller, and mistress of all household affairs. Whatever its original intension was, *mātar* soon became a mere name. Its etymological keynote was no longer audible, and *mātar* meant mother and all that was implied in that name when used by children and others.

If we compare all the words which contain this *mā* as their common element, we can see that it meant originally to put two or more things together. This led to two applications. What we call measuring

is really putting two things together, one by the side of another, to see how far they agree and how far they differ. Thus *mā* took the special meaning of measuring, in such words as Greek μέτρον and Sanskrit mātram. But to put together could also be used in the sense of joining, carpentering, building, and making, and this meaning we find in such words as (Sanskrit) mānas, a building, māti, he measures, he makes, and likewise *materies*, what has been fashioned, what can be used for building a hut, timber, wood, building material, then any kind of material, and at last matter, substance in its most general acceptation.

You can see here very clearly the twofold process in the formation of words, first, from the general to the particular—from measuring to wood, and then from the particular to the general, from timber to matter.

If you ask, what is this syllable *mā* which has the general meaning of measuring and making, I can only answer, We know, and we do not know. We know as a fact that it is the common element in a number of words, which are differentiated by a number of derivative elements, called suffixes, prefixes, and infixes, but which can all be shown to share in common the general meaning of making and measuring. These common elements have been called roots. The question whether these roots ever existed by themselves, and whether any language could ever have consisted of these roots, is a foolish question. For as soon as a root occurs in a sentence, it is either a subject or a predicate, a noun or a verb, and it has ceased to be a mere root. But on the other hand, it is

quite true that in certain languages, as, for instance, in Chinese, there is no formal difference between a root and a word—there are no suffixes or prefixes. But the strict rules of the collocation of words in every sentence make it quite clear whether a word is to be taken as a substantive, a verb, an adjective, an adverb, and all the rest.

By the same process by which we have reduced a number of words to the root *mā*, the whole dictionary of Sanskrit, and of English also, in fact of all the Aryan and likewise of the Semitic languages, has been reduced to a small number of roots. Given that small number of roots, we undertake to account for the whole wealth of words in any language, simply by means of derivation with suffixes and prefixes, and by means of composition.

In all this we are dealing with fact, facts which are as well ascertained as any facts in physical science.

Making allowance for a small margin of words which have as yet resisted all attempts at etymological analysis, we can state that the vast majority of words in Sanskrit has been reduced to about 800 roots. In the progress of language whole families of words derived from some of these roots become extinct, while others continue prolific and take their place. The consequence is that the number of roots in English has dwindled down to 461, while the sum total of words has risen to about 250,000.

Every one of these roots has a general or conceptual meaning, such as striking, pushing, rubbing, cutting, bearing, binding, measuring, building, moving, going, falling, and all the rest.

It often happens, however, that two or more roots

have the same or nearly the same meaning, and this explains why, when we count the fundamental concepts expressed by our 800 roots in Sanskrit, we find that they amount to no more than 121.

I say again that in all this we are dealing with well ascertained facts.

The next step, however, leads us into the domain of theory. If we are asked how these roots came into existence, we may decline to answer the question as outside the limits of science. A chemist would probably do the same, if he were asked how the chemical elements came into existence. In fact, the students of the Science of Language have always taken their stand here, and have treated roots as ultimate facts.

I ought to mention, however, two theories which, though they have long been surrendered by students of the Science of Language, still enjoy a certain popularity, and commend themselves to many people by their extreme simplicity and plausibility.

The first consists in ascribing the roots of all languages to a direct communication from God. It is impossible to refute such an opinion; all we can say is that such a communication, if we try to realize it in imagination, would imply such a crude anthropomorphism that one naturally shrinks from entering into details.

The second consists in looking upon roots as imitations of the sounds of nature or as interjections. Here all we can say is that the experiment has been tried again and again, and has failed. Every language contains no doubt a considerable number of such words which are mere imitations of the sounds

of nature or interjections, with a few compounds and derivatives. They form the regular stock-in-trade of all who imagine that they have found a short cut to the springs of human speech. Who can doubt the origin of *bow-wow*, a dog, or of *pooh-poohing*, in the sense of rejecting? But the great stock of words cannot be accounted for by this easy process, and no serious scholar would think of resuscitating what many years ago I described as the Bow-wow and Pooh-pooh theories.

But while the student of language seems to me to have a perfect right to treat the roots of language as ultimate facts, it is difficult for the philosopher not to look beyond. He cannot hope to do more than to suggest an hypothesis, but if his hypothesis accounts for the few facts he has to deal with, such an hypothesis is legitimate, though, no doubt, it is very far from being an established truth.

The hypothesis which I suggested on the origin of roots, was suggested to me by Professor Noiré's hypothesis as to the origin of concepts. My late friend, Professor Noiré, was one of those who discovered difficulties where no one else saw them. While most philosophers were satisfied with the fact that man possessed the power of forming, not only percepts, but concepts also, while no trace of conceptual thought was found in animals, Noiré subjected this power of forming concepts to a most minute psychological analysis, and thus was brought face to face with the question, what was, from a psychogenetic point of view, the real impulse to the formation of conceptual thought. Questions like this, which to most people seem perfectly superfluous, often mark

the real progress in the history of philosophy. Logicians see no difficulty in explaining how, either by addition or subtraction, positively or negatively, concepts are formed out of percepts. White, they say, is either what snow, milk, and marble share in common, or what remains if we drop from snow, milk, and marble all but their colour. The psychologist who looks upon the human mind as the result of an evolution, whether in the individual or in the race, asks, not *how*, but *why* such concepts should have been formed. Now Professor Noiré showed, as I thought, with great sagacity, that the first inevitable concepts arose from man's consciousness of his own repeated acts; that nowhere in nature could we find a similar primitive and irresistible impulse to conceptual thought, but that if the beginning had once been made, there was no longer any difficulty in accounting for the further development of conceptual thought in all directions.

I call this no more than an hypothesis, or, if you like, a guess, and I do not see how, in the regions in which we find ourselves, we can expect anything more than an hypothesis. But when one hypothesis, like that of Noiré's, harmonizes with another hypothesis, that was formed quite independently, we cannot help seeing that the two lend each other powerful mutual support.

Let us remember, then, that a most careful psychological analysis had led Noiré to the conclusion that the germs of all conceptual thought were to be found in the consciousness of our own repeated acts. And let us place by the side of this, the well-ascertained fact that the germs of all conceptual language, what



we call the roots, express with few exceptions the repeated acts of men. Is not the conclusion almost inevitable that these two processes were in reality but two sides of one and the same process in the evolution of human thought and human language? Professor Noiré did not know of the linguistic fact, when he arrived at his psychological conclusions. I did not know of his psychological conclusions, when I arrived at my linguistic facts. But when I saw that by different roads we had both arrived at exactly the same point, I thought that this could not be by an accident.

There remained, however, one more question to be answered, and that question again could be answered hypothetically only. How can we account for the sounds of the roots, which we have recognized as the germs of conceptual thought and conceptual language? Why should, for instance, the concept of rubbing be expressed by *MAR*, and that of tearing by *DAR*? Here again Noiré and others before him have pointed to the well-known fact that men, when engaged in common acts, find a relief in emitting their breath in more or less musical modulation. It has therefore been supposed that our roots are the remnants of sounds which accompanied these acts, and which, being used, not by one man only, but by men acting in common, were therefore intelligible to the whole community.

No one would dream of representing this theory of the origin of our conceptual roots as a well-ascertained historical fact. It is and can only be an hypothesis. But, as such, it fulfils all the requirements of a working hypothesis. It explains all that has to be

explained, and it does not run counter to any facts, or any well-established theories. It explains the sounds of our roots, not as mere interjections, which would be the signs of momentary feelings, and not, what we want, the signs of our consciousness of a number of repeated acts as one action. Our roots are, if we may venture to say so, conceptual, not interjectional sounds. They are, in fact, exactly what, according to Noiré's philosophical system, the primary elements of language ought to be.

I do not say that this theory is the only possible theory of the origin of roots, and therefore of language. Let a better theory be started, and I shall be delighted to accept it. But don't let us try to revive exploded theories, unless there are new facts to support them. I can only give you my own experience. For many years I was satisfied to look upon roots as ultimate facts. But when Professor Noiré showed that the fundamental concepts of our thought must be concepts expressive of our own acts, and when thereupon I went carefully through the list of our Aryan roots and found that with few exceptions, every one of them, as a matter of fact, expressed the ordinary acts of men in a simple state of civilization, I was driven to the conclusion that the primitive roots of Aryan speech may owe their origin to the sounds which naturally accompany many acts performed in common by members of a family, a clan, or a village. This would vindicate once more the conviction which I have always held that language was from the beginning conceptual, and confirm the well-known statement of Locke, that 'the having of general ideas is that which puts a perfect distinction between man and brutes, and

is an excellency which the faculties of brutes do by no means attain to.'

Allow me in conclusion to say a few words on what I can hardly call a criticism, but rather a misrepresentation, or, I ought perhaps to say, a complete misapprehension of this theory of the origin of roots which appeared in a book lately published by Professor Romanes, *Mental Evolution in Man*, as a continuation of an earlier work of his, called *Mental Evolution in Animals*. My learned friend, Professor Romanes, labours to show that there is an unbroken mental evolution from the lowest animal to the highest man. But he sees very clearly and confesses very honestly that the chief difficulty in this evolution is language and all that language implies. He tries very hard to remove that barrier between beast and man. For that purpose he devotes a whole chapter, the thirteenth, to a consideration of the roots of language, and yet he says at the end of the chapter, 'I wish in conclusion to make it clear that the matter—that is, the question whether roots are imitations of sound or interjections—is not one which seriously affects the theory of evolution.'

If it were so, why should Professor Romanes have devoted a whole chapter to it? But it is not my intention to argue this question with Professor Romanes, but rather to show how difficult it is for any one, not acquainted with the Science of Language, even to apprehend the problems that have to be solved. Professor Romanes is, I believe, a most eminent biologist, and the mantle of Darwin is said to have fallen on his shoulders. Far be it from me to venture to criticize his biological facts. But we see in his case

how dangerous it is for a man who can claim to speak with authority on his own special subject, to venture to speak authoritatively on subjects not his own. Professor Romanes has, no doubt, read several books on philology and philosophy, but he is not sufficiently master of his subject to have the slightest right to speak of men like Noiré, Huxley, Herbert Spencer, to say nothing of Hobbes, with an air of superiority. That is entirely out of place. When he points out differences of opinion between philologists, he does not even understand how they have arisen, and he ought to know better than anybody else that mere difference of opinion between two competent scholars does not prove that both are wrong, and can never be used to throw discredit on the whole science.

But as I said just now, I am not going to argue with Professor Romanes because, as he says himself (p. 276), if I were right, his whole theory would collapse. I hope this is not the case, but I feel sure that, if it were, Professor Romanes would only rejoice at it. Anyhow, why introduce so much of the *meum* and *tuum* into these discussions? If it could be proved, for instance, that the Âryas came from Europe, then, no doubt, the other theory, that they came from Asia, would collapse. But among serious students every such collapse would be greeted with gratitude, and would be looked upon simply as a step in advance. We are all fellow workers, we all care for one thing only, the discovery of truth. It is in this spirit, and without a thought of any collapse, that I venture to point out a number of clear mistakes which occur on almost every page when Mr. Romanes touches linguistic questions, and which fully account for his not

perceiving the true character of the evidence placed before us by the Science of Language.

On page 267 he says that I profess, as a result of more recent researches, to have reduced the number of Sanskrit roots to 121.

I wish I had. But the number of roots in Sanskrit stands as yet at about 800; the number 121, of which he speaks, is the number of concepts expressed by these roots, many of them conveying the same, or nearly the same idea. A root is one thing, a concept quite another. To confuse the two is like confusing thought and expression.

I thought I had made it quite clear that these 121 concepts, conveyed by about 800 roots, are simply and solely the residue of a careful analysis of Sanskrit, and of Sanskrit only. I took particular care to make this clear. 'They constitute the stock-in-trade,' I said, 'with which every thought that has ever passed through the mind of India, so far as it is known to us in its literature, has been expressed.' What can be clearer? Still Professor Romanes thinks it necessary to remark that 'these concepts do not represent the ideation of primitive man!' I never said they did. I never pretended to be acquainted with the ideation of primitive man. All I maintained was that, making allowance for obscure words, every thought, that of the lowest savage as well as that of the most minute philosopher, can be expressed with these 800 roots, and traced back to these 121 concepts. I even hinted that the number of these concepts might be considerably reduced. The question is not whether forms of activity, such as *to yawn*, *to spew*, *to vomit*, *to sweat*, were of vital importance to the needs of a primitive

community, but whether they were known and therefore named, in the early vocabulary of India. If, on the other hand, some of these concepts, such as *to cook*, *to roast*, *to measure*, *to dig*, *to plait*, *to milk*, betoken an advanced condition of life, all we can say is that they would probably not occur in the dictionary of primeval savages, wherever such beings can be found, and that they do not profess to be the first utterances of the *Homo atalus*, whoever that may be. They are what is left us of the constituent elements of Sanskrit, just as the roots of English are what is left of the constituent elements of Saxon.

Immediately after this, Professor Romanes dwells on what he calls the interesting feature of all roots being verbs. This is simply a contradiction in terms. In giving the meaning of roots, scholars generally employ the infinitive or the participle, to go, or going, but they have stated again and again that a root ceases to be a root as soon as it is used in a sentence, either as a subject or as a predicate, either as a noun or a verb. All his arguments therefore that archaic words, expressive of actions, would have stood a better chance of surviving as roots than those which may have been expressive of objects, are simply out of place. The question whether verbs came first or nouns, may be argued *ad infinitum*, quite as much as the question whether the egg came first or the chicken. Every sentence requires a subject as well as a predicate. If Professor Romanes approves of my saying that roots stood for any part of speech, just as the monosyllabic expressions of children do, I can only say that if I ever said so, I expressed myself incorrectly. A root never stands for any part of

speech, because as soon as it is a part of speech it is no longer a root.

After that, Professor Romanes returns once more to his statement that the roots of Aryan speech are not the aboriginal elements of language, as first spoken by man. Why deny what has never been asserted? I know nothing of the language as first spoken by man. I say with Steinthal, 'Who was present when the first sound of language burst forth from the breast of the first man, as yet dumb?' All that we, the students of language, undertake to do is to take language as we find it, to analyse it, and to reduce it to its simplest component elements. What we cannot analyse, we leave alone. The utmost we venture to do is to suggest an hypothesis as to the possible origin of these elements. Of the *Homo alalus*, the speechless progenitor of *Homo sapiens*, with whom Professor Romanes seems so intimately acquainted, students of human speech naturally know nothing. Professor Romanes assures us (p. 211) that the reducing of language to a certain small number of roots, and the fact that all the roots of language are expressive of general and generic ideas, yield no support whatever to the doctrine either that these roots were themselves the aboriginal elements of language, or, *a fortiori*, that the aboriginal elements of language were expressive of general ideas. He evidently does not see that we are speaking of two quite different things. I am speaking of the facts of language, he is speaking of the postulates of a biological theory which may be right or wrong, but which certainly derives no support whatever from the Science of Language. If, like Professor Romanes, we begin with the

'immense presumption that there has been no interruption in the developmental process in the course of psychological history,' the protest of language counts for nothing; the very fact that no animal has ever formed a language, is put aside simply as an unfortunate accident. But to students to whom facts are facts, immense presumptions count for nothing: on the contrary they are looked upon as the most dangerous merchandise, and most likely to lead to shipwreck and ruin.

Instead of closing with these facts, Professor Romanes tries to show that those who try to explain them are not always consistent. That may be so, and I should be sorry indeed if my latest views were not more advanced and more correct than those which I expressed forty years ago. But very often where Professor Romanes sees inconsistency, there is none at all.

Speaking of roots in my *Science of Thought*, I said: 'Although during the time when the growth of language becomes historical and most accessible, therefore, to our observation, the tendency certainly is from the general to the special, I cannot resist the conviction that before that time there was a pre-historic period during which language followed an opposite direction. During that period, roots beginning with special meanings (though, of course, always general in character) became more and more generalized, and it was only after reaching that stage that they branched off again into special channels.'

The observation which I recorded in these words was simply this, that a root meaning originally to



yawn, may in time assume the meaning of opening, while during a later period a root meaning to open, may come to be used in the more special sense of yawning. Facts are there to prove this. But whether a root expresses the act of yawning or opening, it remains general and conceptual in either case, though the intension of the concept may be smaller or larger. Where Professor Romanes sees inconsistency, he only shows that he has not apprehended the drift of my remarks.

When all the facts of real language are against him, Professor Romanes betakes himself to baby-language. Here he is safe, and he knows quite well, why I refuse to argue with him or any other philosopher either in the nursery, or in the menagerie, either about Mamma and Papa, or about 'Poor Polly.' But if all he wants is to prove the possibility of onomatopœia, he could have found much ampler evidence in my own laboratory, only with this restriction that, after we have analysed these onomatopœic words which in some languages are far more numerous than even Professor Romanes seems to be aware of, we are only on the threshold of the real problem, namely how to deal with real language, that is, with those conceptual words which *cannot* be traced back to natural sounds or interjections.

Professor Romanes appeals to philology in support of his theory, and, to use a favourite phrase of his own, to philology let him go! It was long considered an irrefragable proof in support of the onomatopœic theory that *thunder* was called *thunder*. People imagined they heard the rumbling noise of the clouds

echoed in the sound of thunder. However, the word *was* taken to pieces by comparative philologists, *thunder* *was* found out to be closely connected with the Latin *tonitrus* and the Sanskrit *tanyatu*, and there could be no doubt that these words were all derived from the root TAN, to stretch, from which the Greek *τένον*, stretching, tension, and tone. Thunder, therefore, *was* clearly shown to owe its origin to this root TAN, in which there is very little trace of distant rumble. But what does Professor Romanes do? He appeals in his distress to Archdeacon Farrar, who is reported to have said that the word *thunder*, even if not originally onomatopœic, became so from a feeling of the need that it should be! Now, this fairly takes away one's breath, and I cannot believe that Professor Romanes could have used this argument seriously. He begins by maintaining that words are formed by imitation of natural sounds. He quotes *thunder* as a case in point. He is told by comparative philologists that thunder is derived from a root TAN, to stretch. He does not attempt to deny this, but he appeals to Archdeacon Farrar, who says that the word became afterwards onomatopœic, from a feeling of the need that it should be so. If that is not shirking the question, I do not know what is. Suppose it were true that thunder had been supposed to be an imitation of a rumbling noise by those who, like Professor Romanes, are convinced that all words must be more or less onomatopœic. What in all the world has that to do with the real origin of the word? We want to know how the word *thunder* came to be, and we are told, if it was not onomatopœic, it ought to have been so, nay that by certain ignorant

people it was supposed to be so. This goes beyond the limits of what is allowed in any serious discussion.

But Professor Romanes attempts a still greater triumph in forensic adroitness, when he suddenly turns round and declares himself altogether convinced by the theory proposed by Noiré and myself, though at the same time placing it on a level with the Bow-wow and Pooh-pooh theories. Now the fact is, that both Noiré and myself have been most anxious to show the fundamental difference between these two exploded theories and our own. The theory which I, for clearness' sake, was quite willing to call the *Yo-he-ho* theory, is the very opposite of what Noiré called the *Synergastic* theory. Those who appeal to words like *thunder* as derived from the rumbling sound in the clouds, without any conceptual root standing between our conceptual word *thunder* and these unconceptual noises, hold the Bow-wow theory. Those who hold that *fiend* is derived direct from the interjection *fie*, without any conceptual root standing between the unconceptual *fie* and the conceptual word *fiend*, hold the Pooh-pooh theory. Those who would derive *to heave* and *to hoist* from sounds like *Yo-he-ho* would hold what may be called the *Yo-he-ho* theory. I have never denied that there are some words in every language which may be so explained.

But what similarity is there between these theories and our own? We begin with the fact that the great bulk of a language consists of words, derived, according to the strictest rules, not from cries, but from articulate roots. No one denies this. We follow

this up with a second fact, that nearly all these roots express acts of men. No one denies that. We then propound an hypothesis that possibly the phonetic elements of these roots may be the remnants of utterances such as even now sailors make when rowing, soldiers when marching, builders in pulling and lifting, and that as expressing originally the consciousness of such repeated acts, performed in common, these roots would fulfil what is wanted, they would express conceptual thought, such as beating, cutting, rubbing, binding, and all the other 121 concepts from which, as a matter of fact, all the words that fill our dictionaries have been derived. Those who cannot see the difference between a man, or, for all that, between a mocking bird, saying *Cuckoo*, and a whole community fixing on the sound of TAN, as differentiated by various suffixes and prefixes, and expressing the concept of stretching in such words as *tonos*, *tone*, *tonitrus*, *thunder*, *tanu*, *tenuis*, *thin*, should not meddle with the Science of Language.

Observations, for instance, on the language of children, or on what I call Nursery psychology, are very interesting and may be useful for other purposes. But what have they to do with the problem of the origin of language? The two problems, how a child learns to speak English, and how language was elaborated for the first time, are as remote from each other as the two poles. The one is perfectly clear, though it may vary in different children. No child makes its language, it simply accepts what has been made. What *we* are concerned with is, how each word was originally made, how the first impulse to

speech was given, what were the rough materials out of which words were shaped, how words assumed different meanings by becoming specialized or generalized, or by being used metaphorically—how, in the end, some words became purely formal, and served as the grammatical articulations of human speech. What has that to do with a child learning to say *Bread* or *Milk*, or with a parrot learning to say *Poor Polly*? We might as well try to study the geological stratification of the earth from watching the layers of a wedding-cake. I know quite well that every philosopher, when he becomes a father, thinks that he may discover the origin of language in his nursery. The books which owe their origin to these paternal experiments are endless. But they have thrown hardly one ray of pure light on the dark problem of the origin and evolution of human speech. That problem, if it can be solved at all, can only be solved by a careful analysis of language, such as it exists in the immense varieties of spoken languages all over the globe. This is the work which the Science of Language has carried out for nearly a century, and which will occupy the minds of many students and philosophers for centuries to come.

## LITERATURE BEFORE LETTERS<sup>1</sup>.

THE question has often been discussed whether there could possibly have been anything like what we call literature before the invention of our alphabet, or of any letters, whether hieroglyphic, cuneiform, or Chinese. Years ago this question was the subject of hot controversy between those who maintained that the original Homeric poems were composed before letters, paper, and ink were known to the Greeks, and that for some time they were handed down by oral tradition before they were reduced to writing, and the large public who declared such an idea was simply incredible, impossible, nay, unthinkable. These adjectives are very handy, but they are always suspicious by their very positiveness. If ethnology had been studied in the days of F. A. Wolf as it is now, these brave adjectives would soon have collapsed before the evidence which we now possess of the existence of poetical and literary works in different parts of the world long before there is any sign of a knowledge of written letters. To quote a few examples only—Prince, in the *Proceedings of the American Philosophical Society*, December, 1897, p. 480, states that the records of Indian tribes were in nearly all cases transmitted orally by elderly men whose memories had been specially trained for the

<sup>1</sup> *Nineteenth Century*, November, 1899.

purpose from their youth. It was customary for these keepers of the tribal history from time to time to instruct the younger members of their clan in the annals of their people. The records thus transmitted in the case of the Passamaquoddies were kept in the memory of the historians by means of a mnemonic system assisted by the so-called wampum-shells, which were arranged on strings in such a manner that certain combinations suggested certain sentences or ideas to the narrator or 'reader,' who, of course, already knew his record by heart, and was merely aided in his memory by associating the arrangements of the wampum-beads with incidents or sentences in the tale, song, or ceremony which he was rendering. This explains such expressions as 'marriage-wampum' or 'burial-wampum,' which are common among the Passamaquoddies, and simply mean combinations of wampum-shells which suggested to the initiated interpreter the ritual of the tribal marriage and burial ceremonies, something like the *Grihya-Sûtras* of the Vedic age.

This custom of preserving records by means of a mnemonic system was known to all the tribes of the Algonquin race as well as to the Iroquois clan. Brinton refers to the record of tally-sticks of the Crees and Chippeways as 'the rude beginning of the system of mnemonic aids.'

The late Rev. W. W. Gill, who first civilized and then converted the whole of the island of Mangaia, described a considerable mnemonic literature as still existing in many of the islands of the South Pacific. It is metrical, and its language has retained certain archaisms, so as to differ slightly, but characteristi-

cally, from the spoken language. Those who learn these forms by heart enjoy great respect and influence among their people, and their records are accepted as authoritative for deciding any questions of inheritance, of disputed frontiers, of dynastic succession, &c., provided always that they are in metre and in the old language of the islands. Gill has published a number of these ancient songs which he had learned from his own converts. Were there no such keepers of records in Samoa for settling the succession?

A still more extraordinary case of the preservation of a large epic poem by means of memory only was discovered among the inhabitants of Finland. Here a large number of popular poems were collected at the beginning of our century by Lönnrot and others, poems which had lived on, as it would seem, without any elaborate measures having been taken for their careful preservation. They were collected in the spinning-rooms and bath-rooms, and there were but slight discrepancies between the same poems as recited by men and women in different parts of the country. All these poems, though apparently independent of each other, like the Homeric *Aristeias*, were easily arranged into one coherent epic, the *Kalevala*, though Lönnrot made no secret that, as he had learnt a larger number of those poems than any of the regular rhapsodes, he thought himself free to take the same liberties with them which they constantly did. All this is extremely interesting and instructive to all who are occupied with the Homeric question under several of its most important aspects.

These cases, to which more might be added, prove, at all events, the fact that, before the invention of



letters, oral tradition was the only means of preserving and handing down religious, legal, and poetical documents from one generation to another, and thus laying the foundations of what we call a civilized life, based on handing down the experience of each generation to succeeding generations.

But while in many parts of the world these literary attempts remained naturally very imperfect, they were brought to a high state of perfection among the people of Mesopotamia, China, and Egypt, while in India they actually led on to a complete literature preserved in alphabetic writing. It was particularly that clan or caste which is commonly called the caste of the Brâhmans that cultivated literary compositions, and though they were averse to multiplying MSS. or books, one of the old alphabets is actually called Brâhmî, the alphabet of their god Brahîmâ or of the Brâhmans. But though, for reasons of their own—that is, in order to keep the education of the higher ranks in their own hands—the Brâhmans resisted the multiplication of MSS. and insisted on their sacred literature being handed down by one generation to another according to a strict discipline which formed the foundation of their popular education, we see there better than anywhere else how large a mass of literature may be preserved by memory alone, provided there is a scholastic method by which the memory is disciplined and strengthened for these extraordinary efforts. No wonder that modern schoolmasters consider such achievements as quite impossible, incredible, and unthinkable. They are like the fishes who, from living for generations in dark caves, have nearly or altogether lost the use

of their eyes, and would naturally shake their heads when they were told that there was such a thing as light.

One thing is certainly surprising—namely, that neither in Greece nor in India do we find any trace of the revolution that must have been introduced by the discovery of writing or its application to the better preservation of a literature that had till then been purely mnemonic. The invention of printing is, after all, a purely mechanical improvement, which any woodcarver might have made without much effort or ingenuity. Its effects, however, were colossal, and such words as printing, imprinting, publishing, edition, &c., soon found their place in the dictionary of every language. The invention of an alphabet and its application to the preserving and spreading of literary compositions, required a much greater expenditure of ingenuity, and must have caused an immense revolution in the intellectual constitution of the leading nations of the world, and yet we meet almost nowhere with any expression of wonder and admiration.

The reason for this may have been that writing came in very early and very gradually. At first it was used not for literary purposes, but for official inscriptions on monuments and coins, for treaties between States, or for commercial intercourse between the merchants of old. It was, in fact, at first a matter of engraving rather than of painting, of the chisel and stilus rather than of the brush, the reed, and colour (ink, &c.). Thus we find even in countries into which the knowledge of alphabetic writing was clearly imported, ready made, from without—as, for instance, in India—single letters scattered on milestones, used

for marking cattle, employed tentatively on sigloi, then on coins and public monuments, long before the use of the alphabet, slightly modified and made more current, for literary purposes. In India, for instance, which derived its alphabet from an Aramean source, the first trace of paper instead of stone or metal, and therefore of some colouring substance used for writing, occurs, as I pointed out in my *History of Ancient Sanskrit Literature*, in the account which Nearchus in the fourth century B. C. gives us of what he had seen in India. He speaks of layers of cotton pressed together for the production of paper<sup>1</sup>, a process similar to that which is followed by modern paper-makers in India in the production of their *papier végétal*. This seemed to me to prove the existence of a written language and of paper, probably used in the sea-coast towns visited by foreign merchants, and indispensable for making commercial contracts. But while this would show the use of alphabetic writing on paper in the fourth century B. C., and chiefly for commercial purposes, we must not forget how large a country India is in order to understand what Megasthenes says in one of his fragments<sup>2</sup>, that the Indians in his time—that is, about the same time as Nearchus—had no knowledge of letters, but settled every legal question from memory. If we supposed that ἀπὸ μνήμης<sup>3</sup> could be translated from the *Smṛiti*, the recognized name for legal and other branches of profane literature in Sanskrit, this would show that the Indians

<sup>1</sup> M. M., *History of Ancient Sanskrit Lit.*, p. 515; Bühler, *Ind. Palaeography*, p. 6.

<sup>2</sup> *Fragmenta Historica Graecae*, ed. C. Müller, ii. 430.

<sup>3</sup> M. M., *Hist. A. S. Lit.*, p. 515; Bühler, *loc. cit.*, p. 6.

themselves had explained to Nearchus that their laws existed originally in their memory only, and that their law-books were technically called *Smṛiti* or *μνήμη*.

But what I wanted chiefly to point out is that in that country, in India, where a considerable mnemonic literature existed before writing was introduced from without, where a minute analysis of the sounds of words into letters, vowels, and consonants; nasals, labials, and dentals; surds and sonants; tenues and aspirates, and all the rest, had nevertheless been carried out by ancient grammarians on thorough scientific phonetic principles, little or no surprise was excited by this most extraordinary discovery of writing. One can only suppose that people grew accustomed gradually to the idea of writing, of *parler aux yeux*, by inscriptions on coins, monuments, milestones, and by the marks on cattle, so that its use, it may be at first as a mere help to the memory and afterwards as taking the place of the ancient and sacred mnemonic literature of the country, was not so sudden a shock as it otherwise would have been.

If in later times the invention of letters was ascribed to Brahman, and the alphabet itself called Brâhmî, given by Brahman, nothing could be more natural, considering that he was supposed to be the husband of Vâk, speech, and the creator of all things. These are traditions which cannot be traced back much further than 300 or 400 A.D., and seem in their origin most natural. Another tradition mentioned by Alberuni that the letters had been forgotten in India, and had, by divine revelation, been reinvented by Vyâsa, the son of Parâsara, deserves more serious

attention than it has hitherto received, because there is an episode in the great epic of the Mahābhārata, which is always ascribed to Vyāsa, stating that the god Ganesa, the lord of hosts, was the first to reduce that immense poem to writing, an episode absent in the earlier redactions of the poem. This seems to prove almost with certainty that before that time, before the addition of that episode, the Mahābhārata, as a collected poem, had existed in oral tradition only; at all events, it seems to admit a *deus* as alone fit to deal with such a *nodus*. And here it should be added that Vyāsa, i. e. disposition, would be a very near equivalent of Nyāsa, putting down, the recognized word for writing. If there is no authoritative proof of the existence of the Mahābhārata, with all its constituent chapters, before the eleventh century A.D.<sup>1</sup>, that would put the use of writing for literary purposes very late, and far too late.

But while in India we seldom or never meet with any expression of surprise at the possibility of writing or painting sound, an art which, even to us, would seem miraculous unless we knew its natural origin and its slow and regular historical progress, there are a few passages in Greek literature which seem to indicate that the recollection of a period of purely mnemonic literature was not quite extinct in Greece even at the time of Plato. The Greeks spoke of Mnemosyne (memory) as the mother of all the Muses, that is, of all branches of human knowledge, and even when they speak of Homer as the representative of the Homeric poems, they never represent the

<sup>1</sup> Bühler, loc. cit., p. 4.

blind bard as a writer, not even as an Egyptian scribe with stilus, paper, and ink. And when Plato wrote his fierce attack on the invention of writing, we can clearly perceive from the tone of his invective that those whom he addressed would not have entirely forgotten that wonderful age in which Mnemosyne and her daughters ruled supreme. On that ground the passage in the *Phaedros* is of so much importance that I shall quote it here:—

‘*Sokrates*, I have heard a tradition of antiquity, whether true or not antiquity only knows. . . .

‘*Phaedros*. I wish you would tell me what.

‘*Sokrates*. In the Egyptian city of Naukratis there was a famous old god, whose name was Theuth—the bird which is called the Ibis being sacred to him—and he was the inventor of many arts, such as arithmetic and calculation, and geometry and astronomy, and draughts and dice; but his great discovery was the use of letters. Now, in those days Thammus was the king of the whole of Upper Egypt, which is the district surrounding that great city, called by the Hellenes Egyptian Thebes, and they call the god himself Ammon. To him came Theuth and showed his inventions, desiring that the other Egyptians might be allowed to have the benefit of them. He went through them, and Thammus inquired about their several uses, and praised some of them and censured others, and approved or disapproved of them. There would be no use in repeating all that Thammus said to Theuth in praise or blame of various arts. But when they came to letters, “This,” said Theuth, “will make the Egyptians wiser and give them better memories, for this is the cure of forgetfulness and of



folly." Thammus replied, "O most ingenious Theuth, he who has the gift of invention is not always the best judge of the utility or inutility of his own inventions to the users of them. And in this instance a paternal love of your own child has led you to say what is not the fact, for this invention of yours will create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves. You have found a specific, not for memory, but for reminiscence, and you give your disciples only the pretence of wisdom. They will be hearers of many things and will have learned nothing; they will appear to be omniscient, and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality."

'*Phaedros*. Yes, Sokrates, you can easily invent tales of Egypt or of any other country.'

On this point we may fully agree with *Phaedros*, but the impression remains on my mind that such a diatribe against the art of writing would hardly be intelligible except in a country where the period of mnemonic literature had not yet been entirely forgotten. This impression is confirmed by the statement of Xenophon<sup>1</sup> that in his time clever boys at school had still to learn the whole of the *Iliad* and *Odyssey* by heart, though we know from Plutarch<sup>2</sup> that every schoolmaster at least possessed a copy of the *Iliad*. The Homeric poems themselves were at the same time known to the people at large, not from MSS. which they might read, but from the

<sup>1</sup> *Conv.* iii. 7.

<sup>2</sup> *Alcib.* c. 7.

rhapsodes who travelled about from village to village, from town to town <sup>1</sup>, a stupid race, who hardly understood the meaning of what they were repeating every day before large crowds. However, the fact remains that in no Greek writer do we meet with any expression of wonder at what seems to us the most wonderful invention of antiquity, the discovery of alphabetic writing, beyond the fact that, like the invention of all arts, such as spinning and ploughing, the art of writing also was traced back to some divine author. To say that the literary activity ascribed to Vyāsa, which is far too large for any one individual, represents really the work of a whole period, during which whatever remained of the ancient mnemonic literature of India was for the first time reduced to writing, requires more proof than we can at present produce.

However, the question of a whole period of mnemonic literature preceding everywhere the written literature of a country, though strongly mooted by the school of F. A. Wolf, made little progress before the discovery of the ancient Vedic literature of India. The idea that memory, though a possible, must have been a very unsafe, vehicle for poetry, and still more for prose, was entirely contradicted by what we saw in India. True, the MSS. of the Veda, which I collated in various public and private libraries, proved wonderfully correct. While the MSS. of Greek and Roman classics, and more particularly those of the New Testament, swarm with various readings, the MSS. of the Rig-veda, the sacred hymns of the Brāhmins, are almost free from them in the

<sup>1</sup> Xenophon, *Conv.* iv. 7.



ordinary sense of that word. They may contain some clerical errors here and there, but these clerical errors have never become traditional, they have seldom been copied from one MS. into another, or, if they were, they had some kind of birthright, they belonged, in fact, to some ancient Vedic family, the members of which had preserved some peculiar reading of their own from early times, and would never admit it to be a mere error. They were, in fact, the result of oral tradition as preserved with great care and accuracy in various Vedic families. Thus, when I consulted my friends among the Vedic scholars of India concerning some of these varieties in the text of the Rig-veda, they told me, what I ought to have known from their ancient literature, that MSS. of the Veda had never been considered as of great authority in India, and that their own great scholars never learnt the Veda from MSS., but only from the mouth of a Guru, who had himself learnt it from his Guru, and thus *ad infinitum*. MSS. might be used now and then, but if there should ever be serious doubt or controversy as to the exact wording of a passage, it would be settled in India, not by a collation of MSS., but by an appeal to a living MS., that is, to Srotriya Brâhmans, who had been taught by their Guru in the proper way.

The Rig-veda-Samhitâ consists of 1,017 or 1,028 hymns, each on an average of about ten verses. I have not counted the words, though I have made a complete index of them ; but, if we may trust native scholars, the total number of words in the collection of the Rig-veda amounts to 153,826 <sup>1</sup>.

<sup>1</sup> *Hibbert Lectures*, p. 157.

The editor of the *Indian Antiquary* assures<sup>1</sup> us that there are still thousands of Brāhmanas who know the whole of the Rig-veda by heart. I have myself had visits from native scholars who could repeat large portions of it, and I have been in correspondence with others who assured me that they could do the same when they were only twelve or fifteen years of age. A very distinguished native scholar, Shankar Pandurang Pandit, wrote to me in 1877 : 'I am collating a few of our walking Rig-veda MSS.; taking your text as my basis I find a good many differences, which I shall be able to examine more closely, when I may be able to say whether they are real various readings or not. I will, of course, communicate them all to you before making any use of them publicly, if I can do this at all.'

Another native scholar, who is Professor at the Government College in Poonah, R. G. Bhandarkar, M.A., when writing in the *Indian Antiquary*<sup>2</sup> of the same class of students of the Veda, says : 'Learning the Vedas by heart and repeating them in a manner never to make a single mistake even in the accents, is the occupation of their life.' The best student of the Veda knows by heart the Samhitâ, the Pada, Krama, Gatâ, and Ghana of the hymns, the Aitarêya Brāhmaṇa and Āranyaka, the Kalpa and Grihya-Sūtras of Āśvalāyana, the Nighantu, Nirukta, Khandas, Gṛyotisha, Sikshâ Pāṇini's grammar. A Vaidika is thus a living Vedic library !

I hope my readers have not been frightened by this string of uncouth names. They do not sound so

<sup>1</sup> 1870, p. 140.

<sup>2</sup> 1874, p. 132 seq.

uncouth as they look, if they will only remember that Sanskrit is pronounced like Italian, that *k, g, t, d, s, h, m*, if printed as italics, represent peculiar modifications of those letters about which they need not trouble themselves in reading, while, if they try to pronounce them, they have only to remember that *k* is pronounced like *ch* in church, and *g* like *j* in join. All the other letters are pronounced as they are written. Before I explain what all these names mean, and what an amount of literature they embrace, I must explain once more that the Vedic students who carry that weight of literature on their shoulders or in their brains never attempt to carry anything else, never during all their life think of anything else. They are what they profess to know, they are the books which they have learnt by heart. Originally the one object of their existence was to preserve these works, to preserve them from that destruction which, before there was writing with ink and paper, would have been inevitable. There was in fact no other way for preserving what was considered sacred, revealed by the Godhead, handed down from teacher to teacher, at first, probably, from father to son, and the loss of which would have involved the loss of all that was most valued in this life, most essential for the next. We must not imagine that every Brâhman learnt all this mass of literature by heart. Every member of the priestly caste, nay, every boy of the second and third castes also, the nobility and the citizens, were expected to learn some portions of it, even without aspiring to become teachers in turn. It was reserved for a smaller *élite* of Brâhmins, and of Brâhmins only, to go through years and years of

the strictest mnemonic discipline in order to become recognized teachers. And it must be remembered that during the whole of their life, from childhood to old age, they had nothing else to do than to keep up by persistent repetition the mnemonic capital which they had acquired. It is no use to consult a Vedic Brâhman on philosophical questions, or a Law Pandit on grammar. He knows one book, and to all intents and purposes is that book. If you want to find a quotation from Manu, open a Law Pandit, and he will give it you, chapter and verse. But the history of the world, geography, astronomy, do not exist for him. Newspapers did not exist, and novels are a very recent growth of native literature. He remained in one groove from beginning to end, and thus the extraordinary feats of memory, which at first sound to us perfectly incredible, become comprehensible. Besides, for what purpose should these mnemonic feats have been invented? No one seems proud of them, they only seem inevitable to account for the existence of a literature at a time when writing was unknown.

It would have removed many difficulties if the Brâhmins had declared that Brahmâ or Ganesa or Vyâsa wrote the Veda, and no one could have contradicted them, for no one knew that writing, even for monumental purposes, does not occur before the age of King Asoka in the third century B.C. In fact all the evidence we can gather from century to century down to the time of Hiouen-thsang and I-tsing, seventh century A.D., and which I have collected elsewhere, admits of one explanation only, namely, that no one in India doubted of the wonder-



ful powers of memory in the preservation of their ancient literature. It may be well to add the independent evidence of what might be supposed to have been hostile witnesses, if indeed the question of hostility could come in, where facts were palpable, uncontested, and incontestable. I no longer assign so early a date to the Buddhist Suttas as I formerly did, nay, I go so far as to admit that though these Suttas may have existed in some form, we cannot prove that they existed in the form of books, such as we have them before the time of Vattagâmini, 80 B.C. But even for that time their evidence is not to be misapprehended. When, for instance, they speak of what the word Brâhman really means, they do not see the essential qualities of that spiritual rank in birth, colour, and knowledge of the Vedas, but in far higher qualities. Brâhman had evidently assumed at that time, in spite of the opposition between Brâhmans and Buddhists, the same meaning which we assign to a true gentleman, a true nobleman, as being not simply a member of a noble family, but a man who possesses true nobility of soul and true gentleness of conduct. Not even a knowledge of the Veda would make a man a real Brâhman, much less a Rishi. And thus we read, for instance, in the *Ambattha Sutta*<sup>1</sup>, 'Though you, *Ambattha* (a Brâhman) can say—I, as a pupil, know by heart the verses of the ancient poets (Rishis) of the Brâhmans, the authors of the verses and reciters of the verses, whose ancient form of words so chanted, uttered, or composed, the Brâhmans of to-day chant over again and rehearse, intoning or

<sup>1</sup> *Sacred Books of the Buddhists*, ii. p. 129.

reciting exactly as they have been intoned or recited, yet are you not on that account a Rishi yourself, or have attained to the state of a Rishi.' What is most important in this passage is that a distinction is made between certain mystic verses, probably the ordinary Mantras, the Gâyatrî, &c., or some of the Mahâvâkyas, and the great mass of verses of the Three Vedas, and that these three (not four) Vedas should be ascribed to certain authors<sup>1</sup>, just as they are now. It is also clear that a number of subsidiary works, some of them in prose, were at that time considered essential in a Brâhman's mnemonic *supellex*. They need not be exactly the same texts which we possess, but they must have treated of the same subjects, such as ritual (Kalpa), phonology (Sikshâ), exegesis (Purânas), legends (Itihâsas), words (Nirukta), grammar (Vyākaraṇa). To these is added Lokâyata, which I should identify with profane (Smṛiti) philosophy, and lastly the indices or Anukramanîs, which many Brâhmanas and even not Brâhmanas know by heart. It is clear, therefore, that in the eyes of the public the Brâhmanas had claimed to be Brâhman on the strength of their mnemonic knowledge, while Buddha himself assigned a far higher sense to that name, and in that higher sense claimed it for himself and for every true gentleman, whether Brâhmana or Samana.

It is but natural that in their efforts to learn the hymns of the Rig-veda, the Brâhmanas should have

<sup>1</sup> *Atthaka* (first *Ashtaka*), *Vamaka*, *Vamadeva*, *Vessâmitta* *Yamaggi*, *Angirasa*, *Bhâradvâga*, *Vasettha*, *Kassapa* and *Bhagu*, evidently, though with slight modifications, the names of the reputed principal authors of the Ten *Mandalas* of the Rig-veda. —Loc. cit., p. 129.

resorted to every kind of mnemonic device in order to facilitate the acquisition of them by their young pupils, and to guard against any corruptions in the text. Thus we learn from time quite as early as any Buddhist texts could claim, from the *Prātisākhya*s, for instance, that the *Samhitā*, the collection of the hymns of the *Rig-veda*, was learnt in five different ways, called (1) *Samhitā*, (2) *Pada*, (3) *Krama*, (4) *Gatā*, (5) *Ghana*.

The first text gives the words pronounced together, with such modifications of final and initial letters as are required by the rules of *Sandhi*, as given in the *Sikshā*, phonetics, and in the grammar of *Pāṇini*.

In the second, or *Pada* text, each word is given by itself, very much as we recite our poetry, without stringing every word together with the following word.

In the third, the *Krama* text, if we take a line consisting of a number of independent words, they have to be recited as follows:—

1, 2; 2, 3; 3, 4; 4, 5; 5, 6; 6, 7; 7, 8, &c. This is supposed to secure to each word both its modified and its unmodified form, and MSS. in which the words of the *Rig-veda* are arranged in that fashion are by no means scarce, nor *Brāhman*s who can recite the hymns in that fashion.

In the *Gatā* text the words are still more complicated. They follow each other according to the following scheme:—

1, 2; 2, 3; 3, 2; 2, 3; 3, 4; 4, 3; 3, 4, &c.

Lastly, in the *Ghana* texts the complication is carried to such a degree that it becomes really absurd, and yet not only are there students who can go

through the whole of the Rig-veda in the Ghana fashion, but I have seen even MSS. in which large portions of this Veda are written out in this fashion, viz. :

1, 2, 2, 1, 1, 2, 3, 3, 2, 1, 1, 2, 3; 2, 3, 3, 2, 2, 3, 4, 4, 3, 2, 2, 3; 2, 3, 3, 2, 2, 3, 4, 4, 3, 2, 2, 3, 4; 3, 4, 4, 3, 3, 4, 5, 5, 4, 3, 3, 4, 5.

These are facts, and how could we account for them if we did not recognize in them the paramount object to assist in the learning of the Veda, and particularly with regard to final and initial letters and the constant modifications of the accents in the preservation of its correctness? The recitation becomes, of course, a mere singsong, but I am told that schoolboys and schoolgirls adopt even now similar tricks in reciting, or in speaking to each other, if they do not wish to be understood by their neighbours. Incredible as such statements may sound to us, our sceptical friends have only to undertake a trip to Bombay and they will return converted. In order to convince me, though I confess that after having read the old *Prātisākhyas* I did not want much convincing, my friend, Shankar Pandurang Pandit, sent me a photograph, which he explains in a letter dated February 28, 1883:—

‘I have been for some time thinking of sending this photograph to you, having purposely had it taken for you. You will perhaps not recognize me there sitting on a chair with a volume of your *Editio Princeps* of the Rig-veda. Behind me stands my friend, Ābaji Vishnu Kathavata, of the Guzerathi Provincial College at Ahmedabad. But the most important figure in the group is the blind man who is sitting in front of me on a stool covered with



a panther skin. He was left blind—entirely blind—by a fell attack of small-pox when he was an infant. He is now about thirty-six years old, and lives on the kindness of his brother, a distinguished member of the Bombay Uncovenanted Civil Service. Blind Kesavabhattacha is a most excellent Vedic scholar, he knows by heart the whole of the Rig-veda-Samhitâ, the whole of the Aitarêya Brâhmana (prose), the whole of Pânini's grammar in eight books, and the rest of the Dasa Granthas, the Ten Books. He can repeat from beginning to end, not only the Samhitâ text, but also the Pada and the Krama texts (as explained before)<sup>1</sup>. I have often examined him with your editions of the Samhitâ and Pada texts in my hands, and found him perfectly accurate in his recitation. He never requires any help to refresh his memory, but is always ready to begin wherever you like. No accent, no letter, no pause, no sound is misplaced, everything is recited in the most correct method.

'I do not claim this man as proving that all the lines which are contained in the Rig-veda could have been composed without paper and ink, but only that they could have been handed down by memory before our alphabetic letters were invented and had been applied to the preservation of ancient poetry. Blind Kesavabhattacha cannot read, he never could read. But his father, being a very pious man, felt it as a great misfortune that his boy should be so unfortunate, and he employed a Vedic scholar to teach him, not in a public school, but at home. He kept him at home

<sup>1</sup> The *Gaîtâ* and *Ghana* seem unknown to the authors of the *Prâtisakhya*.

and also kept another poor Brâhman boy to learn with him. After the Guru, or teacher, had given him lessons daily, the boy sat down with a MS. of the Veda, to learn by heart the same lesson with his blind companion. This was, of course, irregular, but could not be helped in a private class. The blind boy, however, thus learnt by rote whatever the Guru had taught and whatever his young companion helped him to repeat.

‘After about twelve or thirteen years, blind Kesavalbhatta became the perfect Vedic scholar he is now, and has become in turn a teacher of the Veda.’

It must not be supposed, however, that this learning by heart is restricted to Vedic literature. Brâhmanas who devote themselves to the study of law, learn some law-books by heart, and some commentaries on them, and commentaries on commentaries. A grammarian learns the great grammar of Pânini and other grammatical treatises, a philosopher the rules of one or several systems of philosophy, a student of general literature the masterpieces of Kâlidâsa and others.

Women are excluded from these oral teachings, but I have known one case at least where the young daughter of a more liberal-minded Brâhman was allowed to profit by the daily lessons of her brothers. She was the lady who came to me at Oxford, and recited, in the presence of my somewhat incredulous professorial colleagues, the Bhagavadgîtâ, the Amara-Kosha, and large portions of the Bhâgavata-Purâna.

To a student familiar with Sanskrit literature, such confirmatory instances are hardly required. He meets with constant indications that the ancient literature of the Brâhmanas was not a written but a mnemonic

literature, not a book or a volume but some ideal possession handed down from time immemorial and carefully preserved to the present day. We call our sacred literature the *Holy Writ*, or the *Bible*, i.e. the book. With the Aryan nations it has remained customary to speak of what is fore-ordained as 'spoken,' *fatum*; the Semitic nations more usually call it 'what is written.' We speak of volumes, pages, chapters, and verses; why should no such expressions have been applied in ancient times to the Veda? It is called the Veda, that is Knowledge; it is called *Sruti*, that is the Hearing; while the more recent compositions are called *Smṛiti* or Recollection. In later times a human workmanship is distinctly denied to the Veda, and it is therefore called *apaurushêya*, i.e. not made by man. This is surely a strange idea among ancient, and as yet but half-civilized, people, but it seems to have been readily accepted in India. Like some not long departed English divines, who saw in everything miraculous—such as the account of his death, given by Moses himself in the Five Books of Moses—the best proof that Moses must have been a divinely inspired prophet, Hindu theologians also have argued that no ordinary mortal could possibly have predicted the rewards of sacrifices in a future life, as they are promised in the Veda, unless he had heard or seen them. While what they had heard was called *Sruti*, they themselves, because they had been able to see what was hidden from ordinary mortals, were called *Rishis*, seers. All these facts may seem insignificant as arguments, but they are important on account of their very insignificance; they evidently were not designed, but are there, be-

cause the underlying belief was there that the Veda was not a literary composition in the ordinary sense, but a communication made by a divine power and handed down by word of mouth from one generation to another, without the help of a written language. If it should be argued that this system of oral tradition continued to exist at a time when writing and printing were well known and widely practised in India, that the author of the *Laws of Manu* actually anathematizes those who wrote the Veda and learnt it by heart from a book and not from the mouth of a qualified teacher, even this seems to me to confirm the fact that there was a time when writing did not yet exist in India, and when the handing down of the Veda, and with it the education of the people, formed the exclusive privilege of the Brâhmans. Similar survivals of ancient customs are well known. For certain sacred functions a Jewish priest still uses a stone weapon, while a steel knife may be in his pocket; nay, we are told that in Poland, even after the invention of printing, Christian chaplains had to relate or sing the history of their ancestors before the people, instead of reading it<sup>1</sup>. That the hymns of the Veda were originally composed by men who knew a written alphabet, has never been maintained, much less proved. The name assigned to one alphabet, *Brâhmî*, even if it should be meant for 'invented by Brahmâ,' is of late date, and would mean no more than that its origin was unknown, while the name of *Yavanânt Lipi*, used by Pânini, and meaning the writing of the Yavanas, is as honest and straight-

<sup>1</sup> Hillebrandt, *Véd. Mythologie*, p. 100, Anm. 3.

forward a confession of the Brāhmans' acquaintance with an Ionic alphabet as the Greek name of Phoenician letters or the Arab name of Indian numerals.

The more we learn of all the circumstances of life in India during the Vedic Period, the more we shall see how full of contradictions it would become if we tried to foist in among the real achievements of that gifted race the invention of a written alphabet also, representing it as of native origin, like the Egyptian, and treating it, not as a later foreign importation, like coinage and scientific astronomy, but as a natural product of the Indian soil, with its necessary antecedents, the ideographic and syllabic signs. The Hindus had elaborated a most perfect system of all the sounds occurring in language, but they never thought of inventing visible signs for them. That idea came to them from without. No one can doubt that it came to them from a Semitic source, but as to the exact date of that importation, and still more as to the date of its employment for literary purposes, the longer we abstain from positive statements the better for ourselves and for others. It is easy to fix the dates of the oldest historical inscriptions (third century B.C.), but we may still meet with older ones, and as to the books written on paper or MSS., who would dare to fix the date of the earliest, even of the Bower MS., and my own Horiuzi facsimile?

That during all the centuries there was a literature in India, entirely mnemonic and traditional, is doubted by few, and that in order to hand down that literature the most perfect system of learning by heart was contrived and cultivated by the Brāhmans, is a fact that ought to be clearly seen and considered,

for it throws light on some of the most important problems in the early history of India, and indirectly of other countries also. A mere shake of the head and shrugging of the shoulders is here no longer allowed. The question with Sanskrit has always been, Are theories stronger than facts, or facts stronger than theories? The facts, as I have shown, are accessible to anybody who will make a journey to Benares, and the same facts would have met him if he had gone to India in the time of the Prātisākhya, fifth century B.C.

One cannot be too careful in stating facts or opinions which are unwelcome to certain scholars. I have had experience in these matters, and I could easily form a volume if I collected the opinions which have been ascribed to me, but which I never expressed except with considerable limitations. It will most likely be said that I represent the Indian mnemonic system of preserving literary work as preferable to written or printed books. I have occasionally given expression to my regret that the old system of learning by heart at our public schools should have gone so completely out of fashion. Old men like myself know what a precious treasure for life the few lines are that remain indelibly engraved on our memory from our earliest schooldays. Whatever else we forget they remain, and they remind us by their very sound of happy days, of happy faces, and happy hearts.

Alas! our memory has been systematically ruined, and it hardly deserves that name any longer when we remember what memory was in ancient times. We seem to be piling every day heaps of ashes on that divine light within us. Men who read the *Times*

every morning, possibly *Notes and Queries*, then Blue Books, then possibly novels, or it may be serious works on such different subjects as geology, philology, geography, or history, are systematically ruining their memory. They are under the suzerainty of books, and helpless without them. I know there are exceptions, but it is difficult to verify them, and in arranging facts affecting persons, we should be very careful to distinguish between what we have seen ourselves and what has been told us by others. Of the mnemonic achievements of certain Pandits and of the Panditâ Râmbâi, I can speak from personal experience. I have seen and heard them recite their tasks, and that in the presence of other people.

I knew Macaulay, of whom it was said and believed that he could repeat a leading article of the *Times* after having read it once; but I never had the heart to ask him to let me hear him do so. Professor Conington at Oxford enjoyed the same reputation, but I never heard him either repeat a few pages after he had read them. Still, there is nothing so very incredible in this, for when I was at school at Leipzig and the whole class was punished by being kept back till they had learnt two or three chapters of Cicero, I generally was off in about ten minutes. I could not do that now for my very life.

I lately read a very interesting book by the Rev. H. C. Adams, a master at Winchester, which was, and is still, famous for its system of 'standing up.' As it was published in his lifetime, and in the lifetime of the pupils whom he mentions by name, I think he may be fairly trusted. He tells us in *Wykehamica* (1878) that he knew a schoolfellow who never could

learn his repetition, but who could nevertheless go through the whole of the scores in the matches with Eton and Harrow from the very first, giving each player his correct number of runs, and particularly the manner in which he was out.

He knew another, of no remarkable capacity, able to say the whole of the English Bible by rote. Put him on where you would, he would go fluently on as long as there was any one to listen.

When large standings up were said, sometimes 13,000 and 14,000 lines were repeated, and were repeated well too. In Bishop Wordsworth's time, one boy in the Senior Part of the Fifth took up the whole of Virgil for his standing up, and acquitted himself brilliantly, that being only a portion of his eight lessons. I have made the reading of the *Times* every morning responsible for the gradual paralysis of our memory, but what shall we say when we are told the late editor of the *Times*, Mr. Chenery, whose death is still deplored by so many friends, knew the Korân and the Old Testament in Arabic and Hebrew by heart as well as any Ullema or Rabbi<sup>1</sup>? Perhaps those who, like myself, knew him well, may feel a little sceptical. He certainly never mentioned this extraordinary power to me. Judging by our own capacity or incapacity, we may perhaps recall to mind the well-known lines of Horace which we learnt at school many years ago, and which may still supply some comfort to weaker memories and humbler souls:—

Est quadam prodire tenus, si non datur ultra.

I could mention a number of similar cases, but

<sup>1</sup> See *Academy*, February 16, 1884.



very few which I witnessed myself, and I know from sad experience that second-hand evidence in such matters is extremely treacherous. Many times an actor is reported to know ever so many pieces by heart, but that means generally that with the help of other actors, and sometimes with the help of the *souffleur*, he can act and repeat his part. I have heard Brandram recite several plays of Shakespeare entirely by himself, and without a hitch or a flaw. I have myself, in my youth, repeated compositions of more than 100,000 notes on the pianoforte without any effort. The memory is then, I believe, chiefly muscular, not mental, and if any little hitch happens, the chain is often broken, and we must begin again. It might be useful to collect such instances, but it would require great care in distinguishing between what one has seen of such marvels, and what one has only heard.

The whole of this subject is of supreme importance to the student of ancient language, literature, laws, and religion. The date of the introduction of writing, and writing for literary purposes, ought to be settled before we take another step. As it is, it is generally neglected, and leaves antiquity as if surrounded by a constantly shifting mist. It is then that different scholars give expression to their vague and unsupported theories, and such words as incredible, impossible, and unthinkable are boldly met by palpable, inevitable, and self-evident. F. A. Wolf was a great light-bringer by placing in his *Prolegomena* this question of a mnemonic literature in front of all other questions. I followed his example for India, and almost the first essay I ever wrote was 'On the Intro-

duction of Writing into India.' One cannot foresee and anticipate all the doubts in other minds, or answer beforehand all the questions that may be asked. All I can say is that before I wrote that essay I had wrestled with many of those doubts myself, and that they generally arose from ill-supported dates assigned by tradition to the authorities quoted for or against the principle that a mnemonic literature existed nearly everywhere before a written literature, and that nowhere were the difficulties inherent in a mnemonic literature met more systematically and more successfully than in India. Once more I must ask my friends and fellow labourers not to confound knowledge of the alphabet with its employment for literary purposes. A gulf of centuries often lies between these two events. Only we must not allow mere impressions to obscure our sight when trying to pierce through many dark and deceptive clouds surrounding the earliest beginnings of literature and civilization.

## THE SAVAGE<sup>1</sup>.

THERE are people in the world who are very fond of asking what they call point-blank questions. They generally profess to hate all shilly-shallying, and they are at no pains to hide their suspicion that any one who declines to say yes or no to any question which they choose to ask has either his intellect clouded by metaphysics or has not the courage of his opinions. The idea that it is often more difficult to ask a sensible question than to answer it, and that a question, however pointed it may sound, may for all that be so blunt and vague that no accurate and honest thinker would care or dare to answer it, never enters their mind; while the thought that there are realms of knowledge where indefinite language is more appropriate, and in reality more exact and more truthful than the most definite phraseology, is scouted as mere fencing and intellectual cowardice.

One of those point-blank questions which has been addressed to me by several reviewers of my books is this, 'Tell us, do you hold that man began as a savage or not?' To say that man began as a savage, and that the most savage and degraded races now existing present us with the primeval type of man, seems to be the shibboleth of a certain school of thought, a school with which on many points

<sup>1</sup> *Nineteenth Century*, January, 1885.

I sympathize, so long as it keeps to an accurate and independent inquiry into facts, and to an outspoken statement of its discoveries, regardless of all consequences, but from which I totally dissent as soon as it tries to make facts subservient to theories. I am told that my own utterances on this subject have been ambiguous. Now even granting this, I could never understand why a certain hesitation in answering so difficult a question should rouse such angry feelings, till it began to dawn on me that those who do not unreservedly admit that man began as a savage are supposed to hold that man was created a perfect and almost angelic being. This would amount to denying the gospel of the day, that man was the offspring of a brute, and hence, I suppose, the Anathema.

Now I may say this, that though I have hesitated to affirm that man began as a savage, whatever that may mean, I have been even more careful not to commit myself to the opinion that man began as an angel, or as a child, or as a perfect rational being. I strongly object to such alternatives as that if man did not begin as a savage he must have begun as a child. It would be dreadful if, because there is no sufficient evidence to enable us to form a decided opinion on any given subject, we were to be driven into a corner by such alternatives, instead of preserving our freedom of judgement until we have the complete evidence before us.

But in our case the evidence is as yet extremely scanty, and, from the nature of the case, will probably always remain so. If we want to prove that man began as a child, what evidence can we produce?

If we appealed to history, history is impossible before the invention of language; and what language could the primitive child have spoken, what life could it have lived, without a father and without a mother? If we give up history and appeal to our inner consciousness, our reason, nay, our very imagination, collapses when approaching the problem how such a child could have been born, how such a child could have been nourished, reared, and protected from wild animals and other dangers. We feel we have come to the end of our tether, and are running our head against a very old, but a very solid, wall.

Has Kant then written in vain; and is it still supposed that our senses or our reason can ever reach transcendent truths? Has the lesson to be taught again and again that both our senses and our reason have their limits; that we are indeed tethered, and that it is no proof of intellectual strength or suppleness to try to stand on our own shoulders? We are so made that neither can our senses perceive nor can our reason conceive the real beginning and end of anything, whether in space or in time. And yet we imagine we can form a definite conception of the true beginning of mankind.

Then what remains? There remains the humbler and yet far nobler task of studying the earliest records of man's life on earth: to go back as far as literature, language, and tools will allow us, and for the time to consider that as primitive which, whether as a tool, or as a word, or as a proverb, or as a prayer, is the last we can reach, and seems at the same time so simple, so rational, so intelligible, as to require no further antecedents. That is the true

work of the historian, and of the philosopher too; and there is plenty of work left for both of them before they dive into the whirlpool of their inner consciousness to find there the primordial savage.

Instead of allowing ourselves to be driven into a corner by such a question as 'Did man begin as a savage or as a child?' we have a perfect right to ask the question, What is meant by these two words, *savage* and *child*?

Has any one ever attempted to define the meaning of *savage*, and to draw a sharp line between a *savage* and a *non-savage*? Has any one ever attempted to define the meaning of *child*, if used in opposition to *savage* or *brute*? Have we been told whether by *child* is meant a suckling without a mother, or a boy who can speak, and count, and reason without a father? Lastly, are *savage* and *child* really terms that mutually exclude each other? May not a *savage* be a *child*, and may not a *child* be a *savage*?

How, then, is any one who has given serious thought to the problem of the origin of mankind to answer such a question as 'Tell me, do you hold that man began as a *savage* or as a *child*?'

When we read some of the more recent works on anthropology, the primordial *savage* seems to be not unlike one of those hideous india-rubber dolls that can be squeezed into every possible shape, and made to utter every possible noise. There was a time when the *savage* was held up to the civilized man as the inhabitant of a lost paradise—a being of innocence, simplicity, purity, and nobility. Rousseau ascribed to his son of nature all the perfection which he looked for in vain in Paris and London.



At present, when so many philosophers are on the look-out for the missing link between man and beast, the savage, even if he has established his right to the name of man, cannot be painted black enough. He must be at least a man who maltreats his women, murders his children, kills and eats his fellow creatures, and commits crimes from which even animals would shrink.

This devil-savage, however, of the present anthropologist is as much a wild creation of scientific fancy as the angel-savage of former philosophers. The true Science of Man has no room for such speculations.

Sometimes the history of a name can take the place of its definition, but this is hardly so in our case. The Greeks spoke of barbarians rather than of savages, and the Romans followed their example, though they might possibly have called the national heroes and sages of Germany and Britain not only *barbari* but *feri*—that is, savages not very far removed from *ferae*, or wild beasts. Our own word *savage*, and the French *sauvage*, meant originally a man who lived in the woods, a *silvaticus*. It was at first applied to all who remained outside the cities, who were not *cives*, or civilized, and who in Christian times were also called *heathen*—that is, dwellers on the heath.

But all this does not help us much. Of course the Spaniards called the inhabitants of America savages, though it is now quite generally conceded that the Spanish conquerors supplanted a higher civilization than they established<sup>1</sup>. The first discoverers of India

<sup>1</sup> Charles Hawley, *Addresses before the Cayuga County Historical Society*, 1883-4, p. 31.

called the naked Brahmans savages, though they could hardly have followed them in their subtle arguments on every possible philosophical topic. Even by us New Zealanders and Zulus are classed as savages. And yet a Zulu proved a match for an English bishop; and some of the Maori poems and proverbs may rightly claim a place by the side of English popular poems and proverbs. Nothing is gained if it is said that a savage is the opposite of a civilized man. Civilization is the product of the uninterrupted work of many generations; and if savage meant no more than an uncivilized man, it is no great discovery to say that the first man must have been a savage. No doubt he could not have been acquainted even with what we consider the fundamental elements of civilization, such as the arts of reading, writing, and arithmetic. His dress must have been very scanty, his food very primitive, his dwelling very uncomfortable, his family life very unrestrained. And yet, for all that, he might have been very far removed from the brute; nay, he might have been a perfect man, doing his duty in that state of life unto which it pleased God to call him.

Civilization, as it is well known, is as vague a term as savagery. When Alexander, the pupil of Aristotle, the representative of Greek civilization, stood before the naked philosophers of India, who were *ὑλόβιοι*, dwellers in the forest, can we hesitate to say which of the two was the true savage and which the sage? To the New Zealander who has been brought into contact with European civilization, his former so-called savage life seems to have gained little by recent improvements. A grand Maori chief, reputed



to have been one of the strongest men in his youth, thus speaks of the old days<sup>1</sup>:—

‘In former times we lived differently; each tribe had its territory; we lived in *pas* placed high upon the mountains. The men looked to war as their only occupation, and the women and the young people cultivated the fields. We were a strong and a healthy people then. When the Pakeha came, everything began to die away, even the natural animals of the country. Formerly, when we went into a forest, and stood under a tree, we could not hear ourselves speak for the noise of the birds—every tree was full of them. Then we had pigeons and everything in plenty; now many of the birds have died out. . . . In those times the fields were well tilled, there was always plenty of provisions, and we wore few clothes—only our own mats of feathers. Then the missionaries came and took our children from the fields, and taught them to sing hymns: they changed their minds, and the fields were untilled. The children came home and quoted Gospel on an empty stomach. Then came the war between the Pakeha and the Maori that split up our homes, and made one tribe fight against the other; and after the war came the Pakeha settlers, who took our lands, taught us to drink and to smoke, and made us wear clothes that brought on disease. What race could stand against them? The Maori is passing away like the *Kiwi*, the *Tui*, and many other things, and by-and-by they will disappear just like the leaves of the trees, and

<sup>1</sup> *The King Country; or, Explorations in New Zealand.* By T. H. Kerry. See Nicholls in the *Academy*, August 23, 1884, p. 113.

nothing will remain to tell of them but the names of their mountains and their rivers!'

This is the view which a so-called savage takes of the benefits of European civilization as contrasted with the contentment and happiness in which his forefathers had passed through this life. Let us now hear what a highly educated American, a scholar and a philosopher, Mr. Morgan, says of the character of the Iroquois, who are often quoted as specimens of extreme savagery:—

'No test of friendship was too severe; no sacrifice to repay a favour too great; no fidelity to an engagement too inflexible for the red man. With an innate knowledge of the freedom and dignity of man, he has exhibited the noblest virtues of the heart, and the kindest deeds of humanity, in those sylvan retreats we are wont to look upon as vacant and frightful solitudes.'

No one would suspect Morgan of exaggeration or sentimentality. And if it should be objected that these were private virtues only, and no proof of true civilization or a well-organized society among the Iroquois, the same writer tells us<sup>1</sup>:—

'They achieved for themselves a more remarkable civil organization, and acquired a higher degree of influence, than any other race of Indian lineage, except those of Mexico and Peru. In the drama of European colonization they stood for nearly two centuries with an unshaken front against the devastations of war, the blighting influence of foreign intercourse, and the still more fatal encroachments of a restless and advancing border population. Under their federal system,

<sup>1</sup> *The League of the Iroquois*, p. 12.

the Iroquois flourished in independence, and were capable of self-protection long after the New England and Virginia races had surrendered their jurisdictions and fallen into the condition of dependent nations; and they now stand forth upon the canvas of Indian history, prominent alike for the wisdom of their civil institutions, their sagacity in the administration of the league, and their courage in its defence.'

The words of another author also may be quoted, who tells us<sup>1</sup> :—

'Their legislation was simple, and the penalties which gave law its sanctions well defined. Their league stood in the consent of the governed. It was a representative popular government, conceived in the wisdom of genuine statesmanship, and with the sagacity to provide against some of the dangers which beset popular institutions. It is said that the framers of our own (the American) government borrowed some of its features from the Iroquois league. Whether or not this be true, it is a matter of history that as early as 1755 a suggestion came from the Iroquois nation to the colonies that they should unite in a confederacy like their own for mutual protection.'

It is the fashion to quote against these favourable statements cases of cruelty committed by the Red Indians or the New Zealanders in their wars among themselves and in their resistance to their white enemies. But let us not forget the bloody pages of our own history. We should probably say that the eighteenth century was one of the most brilliant in the history of Europe. We should probably assign to England at that time a foremost place among

<sup>1</sup> Hawley, loc. cit., p. 17.

European countries, and we know how high a position Scotchmen took during the last century in general culture, in philosophy, in science, and statesmanship. Yet, in his *History of England in the Eighteenth Century*, Mr. Lecky describes the common people of Scotland as broken into fierce clans, ruled by wild chieftains; as thieves and cattle-lifters, kidnappers of men and children to be sold as slaves; as ferocious barbarians, besotted with the most brutal ignorance and the grossest and gloomiest superstitions, possessed of the rudest modes of agriculture, scratching the earth with a crooked piece of wood for a plough, and for a harrow a brush attached to the tail of a horse, otherwise devoid of harness; their food, oatmeal and milk, mixed with blood drawn from the living cow; their cooking, revolting and filthy, boiling their beef in the hide, and roasting fowls in their feathers, with many like customs and demoralizing habits unknown to aboriginal life among the Red Indians.

It will be clear after these few specimens, which might have been considerably increased, that we shall make no step in advance if we continue to use the word *savage* so vaguely as it has been hitherto used. To think is difficult, but it becomes utterly impossible if we use debased or false coin. I have been considered too inquisitive for venturing to ask anthropologists what they meant by a *fetish*, but I must expose myself once more to the same reproach by venturing to ask them to state plainly what they mean by a *savage*.

Whatever other benefits a study of the science of language may confer, there is one which cannot be

valued too highly—namely, that it makes us not only look *at* words, but *through* words. If we are told that a savage means an uncivilized man, then, to say that the first man was a savage is saying either nothing or what is self-evident. Civilization consists in the accumulated wisdom of countless generations of men, and to say that the first generation of men was uncivilized is therefore pure tautology. We are far too tolerant with respect to such tautologies. How many people, for instance, have been led to imagine that such a phrase as the survival of the fittest contains the solution of the problem of the survival of certain species and the extinction of others? To the student of language the survival of the fittest is a mere tautology, meaning the survival of the fittest to survive, which is the statement of a fact, but no solution of it.

It is easy to say that the meaning of savage has been explained and defined by almost every writer on anthropology. I know these explanations and definitions, but not one of them can be considered as answering the requirements of a scientific definition.

Some anthropologists say that savage means wild and cruel. But in that case no nation would be without its savages. Others say that savages are people who wear little or no clothing. But in that case the greatest philosophers, the gymnosophists of India, would have to be classed as savages. If it means people without a settled form of government, without laws and without a religion, then, go where you like, you will not find such a race. Again, if people who have no cities and no central government are to be called savages, then the Jews would

have been savages, the Hindus, the Arabs, the ancient Germans, and other of the most important races in the history of the world. In fact, whatever characteristics are brought forward as distinctive of a savage, they can always be met by counter-instances, showing that each definition would either include races whom no one dares to call savage, or exclude races whom no one dares to call civilized. It used to be imagined that the use of letters was the principal circumstance that distinguishes a civilized people from a herd of savages incapable of knowledge or reflexion. Without that artificial help, to quote the words of Gibbon, 'the human memory soon dissipates or corrupts the ideas committed to her charge, and the nobler faculties of the mind, no longer supplied with models or with materials, gradually forget their powers, the judgement becomes feeble and lethargic, the imagination languid or irregular.' Such arguments might pass in the days of Gibbon, but after the new light that has been thrown on the ancient history of some of the principal nations of the world they are no longer tenable.

No one would call the ancient Brahmans savages, and yet writing was unknown to them before the third century B.C. Homer, quite apart from his blindness, was certainly unacquainted with writing for literary purposes. The ancient inhabitants of Germany, as described by Tacitus, were equally ignorant of the art of writing as a vehicle of literature; yet for all that we could not say, with Gibbon, that with them the nobler faculties of the mind had lost their powers, the judgement had become feeble, and the imagination languid.

And as we find that the use of letters is by no means an indispensable element of true civilization, we should arrive at the same conclusion in examining almost every discovery which has been pointed out as a *sine qua non* of civilized life. Every generation is apt to consider the measure of comfort which it has reached as indispensable to civilized life, but very often, in small as well as great things, what is called civilized to-day may be called barbarous to-morrow. Races who abstain from eating the flesh of animals are apt to look on carnivorous people as savages; people who abstain from intoxicating drinks naturally despise a nation in which drunkenness is prevalent. What should we say if we entered a town in which the streets were neither paved nor lighted, and in which the windows were without glass; where we saw no carriages in any of the thoroughfares, and where, inside the houses, ladies and gentlemen might be seen eating without forks and wearing garments that had never been washed? And yet even in Paris no street was paved before 1185. In London Holborn was first paved in 1417, and Smithfield in 1614, while Berlin was without paved streets far into the seventeenth century. No houses had windows of glass before the twelfth century, and as late as the fourteenth century anything might be thrown out of window at Paris, after three times calling out '*Gare l'eau!*' Shirts were an invention of the Crusades, and the fine dresses which ladies and gentlemen wore during the Middle Ages were hardly ever washed, but only refreshed from time to time with precious scents. In 1550 we are told that there existed in Paris no more than three carriages—one belonging to the

Queen, the other to Diane de Poitiers, and the third to René de Laval. In England coaches (so called from the Hungarian *kossi*) date from 1580, though whirlicotes go back to the fourteenth century. So far as we know, neither Dante nor Beatrice used forks in eating, and yet we should hardly class them as savages.

It is easy to say that all these are matters of small importance. No doubt they are, but we often see them treated as matters of great importance, when we speak of races with red skins or black skins. With us civilization, whether consisting of these small or great matters, has often become a burden, a check rather than a help to the free development of all that is noble in human nature ; while many conditions of life which we are inclined to call barbarous were almost essential for the growth of the human mind during its earlier stages. Can we imagine a religion growing up in modern Paris ? Would a travelling bard, such as Homer, find an audience in the streets of London ? Would a Socrates be listened to by the professors of Berlin ? A Pânini sitting almost naked under a pippal-tree and composing the rules of his marvellous grammar of Sanskrit, a Bâdarâyana with dishevelled hair, spinning out of his mind the subtle web of Vedânta philosophy, would be shunned as wild creatures by a young English officer ; and yet, on the ladder that leads to the highest excellence of intellect, how many steps would the former stand above the latter ! For carrying out the chief objects of our life on earth, very little of what is now called civilization is really wanted. Many things are pleasant, without being really essential to our fulfilling our mission on earth.



For laying the foundations of society, for settling the broad principles of law and morality, for discovering the deep traces of order and unity in nature, and for becoming conscious of the presence of the Divine within and without, a life in the forests, on the mountains, aye, even in the desert, is far more favourable than a lodging in Bond Street.

The latest attempt which has been made at defining the true character of a savage restricts the distinctive characteristics of a savage to three—(1) that he murders his children, (2) that he kills and eats his fellow men, (3) that he disregards certain laws of nature.

Now in that sense it seems quite clear that the first man could not have been a savage, for if he had murdered his children we should not be alive; if he had eaten his fellow men, supposing there were any to eat, again we should not be alive; and if he had disregarded certain laws of nature, in that case also, probably, we should not be alive.

What, then, is to be done? Are we to say that there never were any savages, or that it is impossible to distinguish between a savage and a non-savage? Certainly not. All we have to do is to be on our guard against a very common trick of language, or rather against a very common mistake of philosophers, who imagine that the same name must always mean the same thing. All the difficulties hitherto detailed which have prevented anthropologists from agreeing on any real definition of savage have arisen from their having mixed up under the same name at least two totally different classes of men, both called savages in ordinary parlance, but each occupying its own place in the history of the world. How this

should have happened is difficult to explain, but I think we can trace the first beginnings in the works of some of the earlier anthropologists, who were carried away by the idea that we can study in the illiterate races of the present day, such as we find in Africa, America, and Polynesia, the true character of the primitive man, as he emerged new-born from the bowels of nature. Scientific ethnologists have long since awaked from this fond dream, but the primitive savage has remained as a troublesome legacy in other quarters. Nothing can be more interesting than the study of races who have no literature, but whose former history may be read in their languages and their tools, and whose present state of civilization or savagery may certainly be used to throw collateral light on many phases in the history of more highly civilized nations. Only let us remember that these races and their languages are as old as the most civilized races and their languages, while their history, if so we may call it, seldom carries us back beyond the mere surface of the day. If we in England are old, the Fuegians are not a day younger. If the question as to the age of the European and American races could be settled by geological evidence, it would seem as if America is now able to produce human skulls older than the Neanderthal skull<sup>1</sup>. No one, so far as I know, has ever succeeded in proving that after man had once been evolved or created, a new evolution or creation of man took place, attested by contemporaneous witnesses. The Duke of Argyll goes so far as to maintain<sup>2</sup> that those

<sup>1</sup> See, however, Daniel Wilson, *Pre-Aryan American Man*, p. 47.

<sup>2</sup> *Unity of Nature*, p. 393.

who hold the opinion that different races of men represent different species, or a species which spread from more than one place, stand outside the general current of scientific thought.

But while scientific anthropologists have long given up the idea that, if we want to know the condition of primitive man, we must study it among the Fuegians or Eskimos, the subject has lost none of its charms. It is, no doubt, a very amusing occupation to run through the books of modern and ancient travellers, traders, or missionaries, to mark with pencil a strange legend here, and an odd custom there, to point out a similarity between a Shâman and an Archbishop, between a Hottentot and Homer. This kind of work can be done in the intervals of more serious studies, and if it is done with the facile pen of a journalist or the epigrammatic eloquence of a young lawyer, nothing can be more delightful. But it is dangerous work—so dangerous that the prejudice that has lately arisen among scientific anthropologists against Agriology seems justified, at least to a certain extent. There are truly scholarlike works on savages. I say scholarlike intentionally, because they are based on a scholarlike study of the languages spoken by the races whose mental organization has to be analysed. The works of Bishops Callaway and Caldwell, of Brinton and Horatio Hale, of Gill, Bleek, and Hahn, the more general compilations of Waitz, Tiele, Lubbock, Tylor, and Reville, the clever contributions of A. Lang, John Fiske, and others, are but the first that occur to my mind as specimens of really useful work that may be done in this line. But the loose and superficial appeals to savages as the representatives of a brand-

new humanity, fresh from the hands of the potter, the ignorant attempts at explaining classical myths from Melanesian tattle, the wild comparisons of Hebrew customs with the outrages of modern cannibals, have at last met with their well-merited reward, and the very name of savage is gradually disappearing from the best works on anthropology and philosophy.

And yet there are savages, only we must distinguish. There are, as I pointed out long ago, two classes of savages, to say nothing of minor subdivisions—namely, *progressive* and *retrogressive* savages. There is a hopeful and a hopeless barbarism, there is a growing and a decaying civilization. We owe a great deal to the Duke of Argyll, particularly in his last great work, *The Unity of Nature*, for having laid so much stress on the fact that of all works of nature man is the one most liable to two kinds of evolution, one ascending and the other descending. Like the individual, a whole family, tribe, or race of men may, within a very short time, rise to the highest pitch of virtue and culture, and in the next generation sink to the lowest level of vice and brutality.

The first question, therefore, which we have to ask when we have to speak of savages, is whether there is any indication of their having once reached a higher stage from which they have descended, or whether they are only just ascending from that low but healthy level which must precede every attempt at what we call civilization. We may call both by the same name of savages, but, if we do so, we must always remember that, from an historical point of view, no two stages in civilized life can be more apart from

each other than that of the retrogressive and that of the progressive savage.

But even after we have laid down this broad line of demarcation, we shall by no means find it easy to catch either a progressive or a retrogressive savage *pur et simple*. If looking out for retrogressive or decaying savages, most people would naturally think of Fuegians, Tasmanians, Hottentots, Ashantis, Veddas, and Red Indians, and one of the strongest proofs of their decay would be derived from the fact that they are dying out wherever they are brought in contact with European civilization. Now it is true that the Tasmanians have become extinct, and that several of the Red Indian tribes, too, have actually been destroyed by our civilization. But we must not generalize too quickly. Some of these very tribes, the Red Indians<sup>1</sup>, seem to be recovering, seem to increase again, and to

<sup>1</sup> *The Indians in the United States.*—In an interesting paper read at a recent meeting of the Académie des Sciences, M. Paul Passy, who has recently returned from a visit to the North-Western States of America, endeavoured to show that the generally accepted theory of the eventual disappearance of the 'red man' is erroneous, and that though certain tribes have been exterminated in war and others decimated by disease and 'firewater,' the contact of civilization is not necessarily fatal to the Indians. M. Passy states that there are at present 376,000 Indians in the country, of whom 67,000 have become United States citizens. The Indians in the reserve territories are in part maintained by the Government, many of them, however, earning their living by shooting and fishing, and also by agriculture. The progress which they have made in farming is shown by the fact that they had under cultivation in 1882 more than 205,000 acres of land, as against 157,000 in 1879. Moreover, the total Indian population, exclusive of the Indians who are citizens of the United States and of those in Alaska, had increased during the same interval by more than 5,000. M. Passy says that the Federal Government, though not doing nearly so much as it should for the education of Indian

be able to hold their own against the baneful influences which threatened to destroy them. The negroes also are by no means dwindling away. On the contrary, they are increasing both in Africa and in America. We must therefore be careful before we deny the recuperative powers even of retrogressive savages, and we must look for other evidence beyond mere statistics in support of their hopeless degeneracy.

Historical evidence of such gradual degeneracy is, from the nature of the case, almost impossible. We must trust, therefore, to less direct proof. I believe there is some distinct historical evidence in the case of the Central and South American races, that at the

children, devoted a sum of \$365,515 to this purpose in 1882, and in the State of New York the six Iroquois 'nations' settled there have excellent schools, which three-fourths of their children regularly attend. The five 'nations' in Indian territory are also well cared for in this respect, having eleven schools for boarders, and 198 day schools attended by 6,183 children. In 1827 a Cherokee invented a syllabic alphabet of eighty-five letters, and this alphabet is now used for the publication of a newspaper in the Cherokee language. In addition to the tribes in cantonments, a great many children (about 8,000) are disseminated among the schools in the different States. There are also three normal and industrial schools in which, apart from elementary subjects, the boys are taught agriculture and different trades, and the girls sewing, cooking, and housekeeping. A journal in the Dakota tongue, called the *Yapi Oaye*, is published at Chicago for the benefit of the pupils in that region, and it is said that the Indians of the territories show themselves very anxious to learn, so much so that the Ometras of Nebraska have sold part of their territory so as to be able to keep up their schools. M. Passy adds that the Americans differ very much in their estimate of the sum required for providing all the young Indians with a sound education, some of them putting it as high as \$10,000,000, while the lowest estimate is \$3,000,000, or ten times as much as is now being spent. His conclusion is that if the Indians are destined to disappear, it will be because they become fused with the other citizens of the United States.—*Times*, Sept. 8, 1884.



time of the arrival of Columbus and his successors civilization had really been decaying for some time in America<sup>1</sup>. But in nearly all other cases we have to look out for other proofs in support of a higher antecedent civilization possessed by tribes who, as we know them at present, have to be classed as savages. Such proofs, if they exist, must be sought for in language, religion, customs, tools, and works of art.

As I look upon language neither as a ready-made gift of God nor as a natural growth of the human mind, but as, in the true sense of the word, a work of human art, I must confess that nothing has surprised me so much as the high art displayed in the languages of so-called savages. I do not wish to exaggerate; and I know quite well that a great abundance of grammatical forms, such as we find in these savage dialects, is by no means a proof of high intellectual development. But if we consider how small is the number of words and ideas in the ordinary vocabulary of an English peasant<sup>2</sup>, and if then we find that one dialect of the Fuegians, the Tagan, consists of about 30,000 words<sup>3</sup>, we certainly hesitate before venturing to classify the possessors of so vast an inherited wealth as the descendants of poor savages, more savage than themselves. Such facts cannot be argued away. We cannot prevent people from despising religious concepts different from their own, or from laughing at customs which they themselves could never adopt. But such a treasure of conceptual thought as is

<sup>1</sup> See Hawley, loc. cit., p. 31.

<sup>2</sup> *Lectures on Science of Language*, i. p. 308.

<sup>3</sup> See Giacomo Bove, *Viaggio alla Patagonia ed alla Terra del Fuoco*, in *Nuova Antologia*, Dec. 15, 1881.

implied in the possession of a vocabulary of 30,000 entries cannot be ignored in our estimate of the antecedents of this Fuegian race. I select the Fuegians as a crucial test simply because Darwin<sup>1</sup> selected them as the strongest proof of his own theory, and placed them almost below the level reached by the most intelligent animals. I have always had a true regard for Darwin, and what I admired in him more than anything else was his fearlessness, his simple devotion to truth. I believe that if he had seen that his own theories were wrong, he would have been the first to declare it, whatever his followers might have said. But in spite of all that, no man can resist the influence of his own convictions. When Darwin looked at the Fuegians, he no doubt saw what he tells us, but then he saw it with Darwinian eyes. According to his account, the party of Fuegians whom he saw resembled the devils which come on the stage in such plays as *Der Freischütz*<sup>2</sup>. 'Viewing such men, one can hardly believe,' he says, 'that they are fellow creatures, and inhabitants of the same world' (p. 235). 'Their language, according to our notions, scarcely deserves to be called articulate. Captain Cook has compared it to a man clearing his throat, but certainly no European ever cleared his throat with so many hoarse, guttural, and clicking sounds.'

Now, even with regard to their physical aspect, Darwin must have either been very unlucky in the Fuegians whom he met, or he cannot have kept himself quite free from prejudice. Captain Parker

<sup>1</sup> *Travels*, Deutsch von Dieffenbach. Braunschweig, 1844, p. 229.

<sup>2</sup> Darwin, *Narrative of the Surveying Voyage of H.M.'s Ships 'Adventure' and 'Beagle'*, 1839, iii. p. 226.



Snow, in his *Two Years' Cruise off Tierra del Fuego* (London, 1857), speaks of them as without the least exaggeration really beautiful representatives of the human race. Professor Virchow, when exhibiting a number of Fuegians at Berlin, strongly protested against the supposition of the Fuegians being by nature an inferior race, so that they might be considered as a connecting link between ape and man. But what shall we say of Darwin's estimate of the Fuegian language? Here we can judge for ourselves, and I doubt whether, so far as its sound is concerned, any one would consider Fuegian as inferior to English. Giacomo Bove, when speaking of the Tagan dialect, says, 'le parole di quella sono dolci, piacevoli, piene di vocali.' And though he admits that some of the other dialects are harsher, yet that is very far as yet from the sound of clearing the throat.

And, even if the sound of their language was as guttural as some of the Swiss dialects, how shall we account for the wealth of their vocabulary? Every concept embodied in their language is the result of hard intellectual labour; and although here again excessive wealth may be an embarrassment, yet there remains enough to prove a past that must have been very different from the present.

The workman must at least have been as great as his work; and if the ruins of Central America tell us of architects greater than any that country could produce at present, the magnificent ruins in the dialects, whether of Fuegians, Mohawks, or Hottentots, tell us of mental builders whom no one could match at present. Even in their religious beliefs there are here and there rays of truth which could never have

proceeded from the dark night of their actual superstitions. The Fuegians, according to Captain Fitzroy, believe in a just god and a great spirit moving about in forests and mountains. They may believe in a great deal more, but people who believe in a great spirit in forests and mountains, and in a just god, are not on the lowest step of the ladder leading from earth to heaven.

The Duke of Argyll, in examining the principal races that are commonly called savage, has pointed out that degraded races generally inhabit the extreme ends of continents or tracts of country almost unfit for human habitation, or again whole islands difficult of access except under exceptionally favourable conditions. He naturally concludes that they did not go there of their own free will, but that they represent conquered races, exiles, weaklings, cowards, criminals, who saved nothing but their life in their flight before more vigorous conquerors, or in their exile from countries that had thrown them off like poison. Instead of looking on the inhabitants of Tierra del Fuego as children of the soil, Autochthones, or the immediate descendants of the mythical Proanthropoi, the Duke points out that it is far more likely they may have come from the north; that their ancestors may have participated in the blessings of the soil and climate of Chili, Peru, Brazil, or Mexico, possibly in the early civilization of that part of the world; and that the wretchedness of the country into which they were driven fully accounts for their present degradation. Take away the wretchedness of their present home, educate a baby, as Captain Fitzroy did, under the beneficent influences of an English sky and of European civilization, and in one generation, as

Mr. Darwin tells us, 'his intellect was good, and his disposition nice.'

It is quite fair that those who oppose this theory should call upon the Duke to establish his view by the evidence of language. If the Fuegians were the descendants of the same race which reached a high pitch of civilization in Peru, Mexico, or Central America, their language ought to show the irrefragable proof of such descent. If it did, his position would be impregnable. Unfortunately the materials now at hand have not yet been sufficiently examined to enable us to say either yes or no. Nor must we forget that language, when it is not fixed by a popular literature, is liable among nomadic tribes to unlimited variation. The number of languages spoken<sup>1</sup> throughout the whole of North and South America has been estimated to considerably exceed 1200; and on the northern continent alone more than 500 distinct languages are said to be spoken, which admit of classification among seventy-five ethnical groups, each with essential linguistic distinctions, pointing to its own parent stock. Some of these languages are merely well-marked dialects, with fully developed vocabularies. Others have more recently acquired a dialectic character in the breaking up and scattering of dismembered tribes, and present a very limited range of vocabulary, suited to the intellectual requirements of a small tribe or band of nomads. The prevailing condition of life throughout the whole North American continent was peculiarly favourable to the multiplication of such dialects and their growth into new languages, owing to the constant breaking

<sup>1</sup> D. Wilson, *Pre-Aryan American Man*, p. 4.

up and scattering of tribes, and the frequent adoption into their numbers of the refugees from other fugitive broken tribes, leading to an intermingling of vocabularies and fresh modifications of speech. It is to be hoped that the study of native American languages may before long receive that attention which it so fully deserves. It must be taken up in good earnest, and with all the accuracy which we are accustomed to in a comparative study of Indo-European languages. All ethnological questions must for the present be kept in abeyance till the linguistic witness can be brought into court, and it would be extraordinary if the laurels that can here be gained should fail to stimulate the ambition of some young scholar in America.

And as the Fuegians at Cape Horn, so at the North Pole the Eskimos, however low their present state of civilization, have been looked upon as immigrants from a centre of civilization located in a more temperate zone. The Eskimo leads the only life that is possible in his latitudes. Why he should have migrated there, unless driven by *force majeure*, it is impossible to say. Unless we are willing to admit a special Eskimo Adam, we have no choice except to look upon him either as a withering offshoot of the American monut-builders, or as a weak descendant of Siberian nomads.

In Africa, the most degraded races, the Bushmen, are clearly a corruption of the Hottentots, while it is well known that some eminent ethnologists look upon the Hottentots as degraded emigrants from Egypt. How much higher the civilization of Africa stood in former ages, we know from the monuments of Egypt and Nubia, from the histories of Phoenicia, Carthage,



and Numidia. If among the ruins of these ancient centres of civilization we now find tribes whom European travellers would call savage, we see again that in the evolution of man retrogression is as important an element as progression.

Even in Australasia, where we meet with the most repulsive customs and the most hopeless barbarism, the Duke of Argyll shows that, according to the principles of evolution, the separation of the islands from the Asiatic continent would date from a period anterior to the age of man, and that here too man must be an immigrant, a degraded offshoot from that branch of the human race which in China or India has risen to some kind of civilized life. For further details the pages in the last book of the Duke of Argyll, particularly chapter x, on the 'Degradation of Man,' should be consulted. It must suffice here to quote his summing up:—

'Instead of assuming these (savage) tribes to be the nearest living representatives of primeval man, we should be more safe in assuming them to represent the widest departure from that earliest condition of our race which, on the theory of development, must of necessity have been associated at first with the most highly favourable conditions of external nature.'

We have thus seen that, wherever we seem to lay hold of primeval savages who are supposed to represent to us the unchanged image of the primeval man, the evidence of their having been autochthonous in the places where we now find them is very weak, the proofs that they have never changed are altogether wanting; while geographical, physical, and linguistic considerations make it probable, though no more, that

they originally came from more favoured countries, that they were driven in the struggle for life into inhospitable climates, and that in accommodating themselves to the requirements of their new homes they gradually descended from a higher level of civilization, indicated by their language and religion, to that low level in which we find them now. Some of them have sunk so low that, like individual members of the noblest families in Europe, they can no longer be reclaimed. Others, however, though shaken by sudden contact with the benefits and the dangers of a higher civilization, may regain their former health and vigour, and, from having been retrogressive savages, become once more progressive in the great struggle for existence.

But if in the cases just mentioned we feel inclined to recognize the influence of degradation, and if we class such races as the Fuegians, the Eskimos, the Bushmen and Hottentots, the Papuans and brown Polynesians, as retrogressive savages, the question arises where we can hope to find specimens of the progressive savage, or rather of the natural man, who might teach us something of what man may have been before civilization completely changed him into an artificial being, forgetful of the essential purposes of life, and who feels at home no longer in fields and forests, on rivers or mountains, but only in that enchanted castle of custom and fashion which he has erected for himself out of the unmeaning fragments of former ages?

My answer is that after we have collected the primitive tools and weapons which lie buried beneath the abodes of civilized man, our best chance of learn-

ing some of the secrets of primitive civilization is to study the sacred hymns and the ancient legends of India, the traditions embodied in the Homeric poems, and whatever has been preserved to us of the most ancient literature of the progressive races of the world, the Italic, Celtic, Slavonic, and Teutonic races. This of course applies to the Aryan race only. The Semitic races are represented to us in their progress from a nomadic to a more or less civilized life in the Old Testament, in the earliest ballads of the Arabs, and in passages scattered in the inscriptions of Assyrians, Babylonians, and Phoenicians. China too in its ancient literature allows us an insight into the age of a nascent society, while Egypt discloses to us the most ancient of all civilizations, which can boast of a literature at a time when the very idea of writing was as yet unknown to all other nations.

It is easy to say that all this is modern. In one sense no doubt it is. The Vedic literature, the most ancient of the whole Aryan race, presupposes a succession of intellectual strata which no chronology can measure. The language of the Veda is a work of art which it must have taken generations to build up. But is it reasonable to expect anything less modern in the history of the human race? And is there not a continuity in language and thought which allows us to see even in these literary remains, call them as modern as you like, something of the first dawn of human life. French is a very modern language, but in *chien* we still hear the Sanskrit *svan*; in *journal* we recognize the old Vedic deity Dyaus. In the same way, we can go back from what is common to Sanskrit, Greek, and Latin, to what was the common

language of the Aryans before they broke up into different nationalities. In that common Aryan vocabulary, again, we can distinguish between what is radical and primitive and what is formal and secondary. Thus we may go back beyond all so-called historical limits to a stage of primitive thought, represented by a small number of radical concepts, and a still smaller number of formal elements. And is not that enough? Is it not more historical and more trustworthy, at all events, than all *a priori* speculations? And have we not at least a right to demand this from our *a priori* friends, that, in running their tunnel from the other end, they should take care that when it emerges into the daylight of history it should meet the tunnel which comparative philology, mythology, and theology have carefully dug out on the opposite side through the solid rock of facts? It will never do for *a priori* theories to run counter to *a posteriori* facts. It is a fact, for instance, proved by historical evidence, that fetishism represents a secondary stage in the growth of religion, and that it presupposes an earlier stage, in which the name and the concept of something divine, the predicate of every fetish, was formed. It would be fatal, therefore, to any system of *a priori* reasoning if it placed fetishism before that phase in the development of human thought which is represented by the first formation of divine concepts. It would be a real hysteron-proteron.

Again, it is a fact, proved by historical evidence, that all the words of the Aryan languages are derived from definite roots, expressive of definite concepts. It would therefore be fatal, again, to any system of *a priori*



reasoning if it attempted to derive words direct from more or less inarticulate cries or imitations of cries, and not from that small number of roots which has been proved to supply all that is really wanted in explanation of all the facts of Aryan speech.

Again, it is a fact, proved by historical evidence, that most of the ancient deities of the Aryan nations have names expressive of the great powers of nature, and it would be an insult to all historical scholarship if our *a priori* friends were to attempt to prove once more that the worship of Zeus was derived from a general reverence felt for a gentleman of the name of Sky, or the belief in Eos from a sentimental devotion excited by a young lady of the name of Dawn. I believe it will be admitted by all honest anthropologists that the philological identification of one single word, Dyaus in the Veda and Zeus in Homer, has done more for rectifying our ideas of the true course of ancient Aryan civilization than all the myths and customs of savages put together.

There was a time when the students of Oriental literature were inclined to claim an extravagant antiquity for the books which they had rescued from oblivion. But that tendency has now been changed into the very opposite. There may be traces of it among Chinese, sometimes among Egyptian and Accadian scholars, but wherever we have to deal with a real literature, whether in India, Persia, or Palestine, scholars are far more anxious to point out what is modern than what is ancient, whether in the Veda, the Avesta, or the Old Testament. I certainly do not feel guilty of ever having claimed an excessive antiquity for the Rig-veda. From the very first, though

I placed the whole of Vedic literature before Buddhism, say the sixth century B. C., and though, owing to the changes in language, style, and thought which are clearly perceptible in different parts of Vedic literature, owing also to certain astronomical dates, I ventured to place it between 1000 and 1500 B. C., yet I have never concealed my impression that some portions of the Veda may turn out to be of far more recent origin<sup>1</sup>.

But is not that sufficient? Is it not perfectly marvellous that so much that is really old, so much that carries us back more than 3,000 years, should have been preserved to us at all? Why will people ask for what is impossible? Savages, they say, do not read and write, and yet they want to have trustworthy information from literary documents composed by those very savages who cannot read and write. Among the Aryan nations, I do not believe in any written books before the sixth century B. C. In China, books may have been older, papyri are older in Egypt, and clay tablets in Babylon. But even when literature began, the very last that ancient people do is to write about themselves, about their manners and customs. What we know of the manners and customs of ancient people, when they were still passing through that phase which we call progressive savagery, comes to us from strangers only. As modern travellers give us full accounts of the life of savages who cannot speak and write for themselves, our only chance of learning something about our own ancestors, before they began to write, would be from

<sup>1</sup> *Rig-veda-Sanhita, the Sacred Hymns of the Brahmins*, translated by M. M., i. p. xxxix.

ancient travellers who were interested in these promising savages. Now it is a piece of excessive good luck that, with regard to one of the Aryan races, with regard to our own Teutonic ancestors, we possess such a book, written by a stranger who felt deeply interested in German savages, and who has told us what they were, before they could write and tell us themselves what they were. If we want to study the progressive savage, not as he ought to have been, according to *a priori* philosophy, nor as he might have been, according to what we see among Fuegians of the present day, but as he really was according to the best information that could be collected by the best of historians, we must read and read again the *Germania* of Tacitus.

If history means the evidence of contemporary eye-witnesses, I doubt whether history will ever enable us to see further into the natural transition of barbarism into civilization than in the *Germania* of Tacitus. To divide civilization from barbarism by a sharp line is of course impossible. There are remnants of barbarism in the most advanced state of civilization, and there are sparks of civilization in the most distant ages of barbarism—at least of that healthy barbarism which is represented to us in the *Germania*, and of which we find but scanty fragments in the ancient literature of the civilizing nations of the world.

Here we may see ourselves as we were not quite two thousand years ago. Here we may see from how small beginnings the highest civilization may be reached. Here we may study the natural man as he really was, in some respects certainly a savage, but

a progressive savage, as we know from his later history, and certainly without one sign of that corruption and decay which is so plainly visible in Hottentots and Papuans.

This book, the account of the site, the manners, and the inhabitants of Germany, by Tacitus, has had various fates. To every German, to every member of the Teutonic race, it has always been a kind of national charter, a picture of a golden age, adorned with all that is considered most perfect, pure, and noble in human nature ; whereas French *savants* have often either ridiculed the work of Tacitus as a mere romance, or so interpreted his words as to turn the ancient Germans into real Hottentots.

This controversy has been carried on during several centuries. M. Guizot, for instance, in his *History of Civilization*, completely ignoring the distinction between retrogressive and progressive savages, tried to show that there was little to choose between the Germans of Tacitus and the Red Indians of the present day.

This controversy became embittered by a curious circumstance. Whereas Tacitus and other Roman writers spoke in glowing terms of the Teutonic races, their remarks on the Gauls, the ancient inhabitants of France, were not only far from complimentary, but happened to touch on points on which Frenchmen are particularly sensitive. Tertullian, who was a great admirer of the Jews, is very wroth with Tacitus because he used very anti-Semitic language. He actually calls Tacitus a 'brawler, and the greatest teller of lies<sup>1</sup>.' The French do not differ much from

<sup>1</sup> Tertullian, *Apolog.* 16 : 'rabula et mendaciorum loquacissimus.'

that opinion, not so much because Tacitus spoke ill of the Jews, and likewise of the Celts of Gaul, as because he spoke so well of the *paysans du Danube*. The ancient classical writers dwell rather strongly on the unfavourable side of the Celtic character. It is well known how low an opinion Aristotle formed of Celtic morality. Strabo says that the Celts are simple, but proud and sensitive, fond of dress and ornaments. It is even hinted that they dyed their hair, and allowed their moustache to grow, so that it interfered with the comfort of eating and drinking<sup>1</sup>. Strabo goes on to say that they are not malicious, but reckless, changeable, fond of innovation, and never to be depended on. They are quick in their resolutions, but often inconsiderate, fond of war, brave, but intolerably conceited if victorious, and quite demoralized if defeated. Polybius confirms that their first onslaught is terrible, but both Caesar and Livy agree as to their want of steadiness and perseverance. Other Latin authors add that they are unmanageable and inclined to revolutions, and that, owing to continual factions, many are obliged to leave the country, and to try their fortunes as adventurers elsewhere. Still darker colours were added by others to this picture of national depravity. The state of morality in Gaul was such that it was considered infamous for a father to be seen in company with his son before the latter had come of age. At the death of a nobleman his widow was, as a matter of course, subjected to a trial as to whether she had been the cause of her husband's death. Strabo affirms that it was their custom to cut off the heads of their enemies after a battle, and

<sup>1</sup> See Strabo, iv. 196; Plin. xviii. 12; Liv. xxxviii. 17.

to hang them on the heads of their horses, or nail them over their doors. While German scholars composed this mosaic out of all the stones that classical writers had ever thrown at the inhabitants of Gaul, French writers retaliated by either throwing discredit on Tacitus, the supposed encomiast of the Germans, or by showing that the account which Tacitus gives of the ancestors of the Teutonic race proves better than anything else that, at his time, the Germans had not yet emerged from a state of the grossest barbarism, and were incapable, therefore, as yet of vices which they maintain are the outcome of a more advanced state of civilization.

To my mind, apart from any national idiosyncrasies, the description which Tacitus gives us of the Germans, as he had seen them, is perfectly unique and invaluable as a picture of what I should willingly call the life of progressive savages. What should we give if, besides the hymns of the Rig-veda, we had the accounts of travellers who had actually seen the ancient Rishis of India with their flocks and families, their priests and sacrifices, their kings and battles? What should we give if, besides the Homeric poems, we had the work of an eye-witness who could describe to us the real Troy, and the real fight between Greece and Asia Minor? This is what Tacitus has done for Germany, and at a time when the ancient religion was still living, when the simple laws of a primitive society were still observed, and when the epic poems of a later time were still being sung as ballads at the feasts of half-naked warriors! In Tacitus, therefore, and not in the missionary accounts of Melanesian savages, should we study the truly primitive man,



primitive in the only sense in which we shall ever know of primitive man, and primitive certainly in a far truer sense than Papuans or Fuegians are likely to be in the nineteenth century. I cannot understand how an historian like Guizot could have allowed himself to be so much misguided by national prejudice as to speak of Tacitus as a kind of Montaigne or Rousseau, who, in a fit of disgust with his own country, drew a picture of Germany as a mere satire on Roman manners, or to call the *Germania* 'the eloquent sulking of a patriotic philosopher who wishes to see virtue where he does not find the disgraceful effeminacy and the elegant depravity of an old society.' Surely the work of Tacitus cannot have been very fresh in the memory of the great French historian when he delivered this judgement. If Tacitus, like Rousseau or Voltaire, had intended to draw the picture of an ideal barbarism, would he have mentioned the many vices of the German Utopia, the indolence of the Germans, their drunkenness, their cruelty to slaves, their passion for gambling, and their riotous revels? Besides, three-fourths of his book treat of subjects which have no bearing whatever on Roman society, nay, which are of so little interest to the general reader that I doubt whether many Romans would have taken the trouble to read them. The facts which came to the knowledge of Tacitus are so loosely strung together that his book looks more like a collection of memoranda than the compact and pointed pamphlet of a political satirist. We need only read the letters of Voltaire on England, or Montalembert's pamphlet, *De l'Angleterre*, in order to perceive the difference between a political satire

and an historical memoir. No doubt a man of the temper of Tacitus would naturally dwell with satisfaction on the bright side of the German character, and, while holding before the eyes of his own nation the picture of a brave and simple, religious and independent race, might naturally think of what Rome once had been, and was no longer. But there is no more sarcasm or satire in his work than is inseparable from a straightforward statement of facts when addressed to ears no longer accustomed to the sound of unvarnished truth.

So little did M. Guizot perceive the unique character of the *Germania* of Tacitus as an historical document of the earliest stage of society, that he amused himself with collecting from various books of travel a number of facts observed among the very lowest races in America and Africa, which, as he thinks, form an exact parallel to the statements of Tacitus with regard to the good and bad qualities of the Germans. His parallel columns, which occupy nearly ten pages, are certainly amusing, but they prove nothing, least of all that there was no difference between the healthy sons of Germany and the tattooed cannibals of New Zealand. If they prove anything, it is that there is one kind of barbarism through which every nation has to pass, the childhood and wild youth of a race, to be followed by the mature vigour of a nation's manhood, and that there is another kind of barbarism which leads to nothing, but ends in mere brutality, shrinking from contact with higher civilization and succumbing when it attempts to imitate with monkeyish delight the virtues and vices of a more advanced society. Why is it that



the fresh breezes of European civilization proved fatal to the consumptive barbarism of the wretched inhabitants of Australia, while the strong constitution of the Germans of Tacitus resisted even the poisonous vapours of Roman life? When the results are so different, surely there must be a difference in the antecedents; and though M. Guizot is successful in showing that in some respects the ancient Germans did the same things and said the same things as Ojibways and Papuans, he forgets in drawing his conclusion the old proverb, *Si duo dicunt idem, non est idem*.

After these remarks it will perhaps seem less surprising that students of antiquity should decline to answer the point-blank question whether man began his life on earth as a savage. Every definition that has been attempted of a savage in general, has broken down as soon as it was confronted with facts. The only characteristic of the savage which remained, and was strong enough to withstand the sharpest cross-examination, was cannibalism. But I am not aware that even the most extreme believers in the primitive savage would insist on his having been necessarily a cannibal, a kind of human Kronos, swallowing his own kith and kin.

Every attempt to place the savage who can *no longer* be called civilized in the place of the savage who can *not yet* be so called, could only end, as it has, in utter confusion of thought.

Something, however, will be gained, or at all events some kind of mutual understanding will become possible, if in future discussions on the character of primitive man a careful distinction is made between the two kinds of savages, the progressive and the

retrogressive. When that distinction has once been grasped, the question whether man began as a savage has no longer anything perplexing about it. Man certainly began as a savage, but as a progressive savage. He certainly did not begin with an innate knowledge of reading, writing, and arithmetic; but, on the other hand, there is nothing to lead us to suppose that he was a being altogether foul and filthy, that when he grew up he invariably ill-treated his wife or wives, and that still later in life he passed his time in eating his children.

If we must need form theories or reason by analogy on the primitive state of man, let us go to the nearest *ci-près*, such as the Vedic Hindus, or the Germans as described by Caesar and Tacitus, but not to Fuegians, who in time, and probably in space also, are the most widely removed from the primitive inhabitants of our globe. If we knew nothing of the manners and customs of the Saxons, when they first settled in these isles, should we imagine that they must have resembled the most depraved classes of modern English society? Let us but once see clearly that the Fuegian, whether as described by Darwin or by Parker Snow, is the most modern of human beings, and we shall pause before we seek in him the image of the first ancestor of the human race. Wherever we look we can see the rise and fall of the human race. We can see it with our own eyes, if we look at the living representatives of some of our oldest and noblest families; we can read it in history if we compare ancient India with modern India, ancient Greece with modern Greece. The idea that the Fuegian was salted and preserved for us during many thousands of years,

so that we might study in him the original type of man, is nothing but a poetical sentiment, unsupported alike by fact, analogy, and reason.

I know full well that when I speak of the Germans of Tacitus or of the Aryans of the Veda as the *ci-près* of primitive man, all the indications of modern, or at all events of secondary and tertiary thought which I have pointed out myself in the hymns of the Rig-veda, and which might easily be collected from the book of Tacitus, will be mustered against me. Must I quote the old saying again: *Est quadam prodire tenus, si non datur ultra?* All I maintain is that these historical documents bring us as near to the primitive man as historical documents can bring us; but that the nearest point within our reach is still very far from the cradle of the human race, no one has pointed out more often than myself.

There is, however, plenty of work still to be done in slowly following up the course of human progress and tracing it back to its earliest stages, as far as literary, monumental, and traditional documents will allow us to do so. There are many intricate windings of that historical river to be explored, many riddles to be solved, many lessons to be learnt. One thing only is quite certain—namely, that the private diary of the first man will never be discovered, least of all at Cape Horn.

I have thus tried to show how untenable is the theory which would boldly identify the modern savage with primitive man, and how cautious we ought to be whenever we take even a few hints here and there from degraded tribes of the present day in order to fill out our imaginary picture of the earliest

civilization of our race. Some lessons, and even important lessons, may be learnt from savages, if only they are studied in a truly scholarlike spirit, as they have been, for instance, by Callaway and Codrington, by Waitz and Tylor. But if the interpretation of an Homeric custom or myth requires care, that of African or Polynesian customs or myths requires ten times greater care; and if a man shrinks from writing on the Veda because he does not know Sanskrit, he should tremble whenever he writes the names of Zulus, unless he has some idea of what Bantu grammar means.

In arguing so far, I have carefully kept to the historical point of view, though I am well aware that the principal traits in the imaginary picture of primitive man are generally taken from a very different source. We are so made that for everything that comes before us we have to postulate a cause and a beginning. We therefore postulate a cause and a beginning for man. The ethnologist is not concerned with the first cause of man, but he cannot resist the craving of his mind to know at least the beginning of man.

Most ethnologists used to hold that, as each individual begins as a child, mankind also began as a child; and they imagined that a careful observation of the modern child would give them some idea of the character of the primeval child. Much ingenuity has been spent on this subject since the days of Voltaire, and many amusing books have been the result; till it was seen at last that the modern baby and the primeval baby have nothing in common but the name, not even a mother or a nurse.

It was chiefly due to Darwin, and to the new impulse which he gave to the theory of evolution, that this line of argument was abandoned as hopeless. Darwin boldly asked the question whose child the primeval human baby could have been, and he answered it by representing the human baby as the child of non-human parents. Admitting even the possibility of this *transitio in aliud genus*, which the most honest of Darwin's followers strenuously deny, what should we gain by this for our purpose—namely, for knowing the primitive state of man, the earliest glimmerings of the human intellect? Our difficulties would remain exactly the same, only pushed back a little further.

Disappointing as it may sound, the fact must be faced, nevertheless, that our reasoning faculties, wonderful as they are, break down completely before all problems concerning the origin of things. We may imagine, we may believe, anything we like about the first man; we can know absolutely nothing. If we trace him back to a primeval cell, the primeval cell that could become a man is more mysterious by far than the man that was evolved from a cell. If we trace him back to a primeval pro-anthropos, the pro-anthropos is more unintelligible to us than even the protanthropos would be. If we trace back the whole solar system to a rotating nebula, that wonderful nebula which by evolution and revolution could become an inhabitable universe is, again, far more mysterious than the universe itself.

The lesson that there are limits to our knowledge is an old lesson, but it has to be taught again and again. It was taught by Buddha, it was taught by Socrates,

and it was taught for the last time in the most powerful manner by Kant. Philosophy has been called the knowledge of our knowledge; it might be called more truly the knowledge of our ignorance, or, to adopt the more moderate language of Kant, the knowledge of the limits of our knowledge.

## PREHISTORIC ANTIQUITIES OF THE INDO-EUROPEANS<sup>1</sup>.

THE ever-increasing division and subdivision of almost every branch of human knowledge into more special branches of study make the specialist, whether he like it or not, more and more dependent on the judgement and the help of his fellow workers. A geologist in our days has often to deal with questions that concern the mineralogist, the chemist, the archaeologist, the philologist, nay, the astronomer, rather than the geologist *pur et simple*, and, as life is too short for all this, nothing is left to him but to appeal to his colleagues for counsel and help. It is one of the great advantages of university life that any one who is in trouble about some question outside his own domain, can at once get the very best information from his colleagues, and many of the happiest views and brightest solutions of complicated problems are due, as is well known, to this free intercourse, this scientific give and take in our academic centres. Here the services of the nearest neighbour are always at hand; in fact, there is much work now being done which could not be done at all except by such co-operation.

Nowhere, however, is this dependence of one science

<sup>1</sup> *Cosmopolis*, September, 1896.

on many others felt more strongly than in the Science of Language. There is, of course, hardly a subject untouched by that science, as little as there is anything that is not touched by language itself; so that, without help from other quarters, a study of the Science of Language would seem altogether beyond the powers of the human mind. A student of that science must, no doubt, possess an accurate knowledge of some at least of the so-called typical languages, whether Greek and Latin, Sanskrit and Zend, Hebrew and Arabic, or Telugu, Burmese, Chinese, &c. Besides these typical languages there is no dialect which has not occasionally to be put under contribution, and there are besides the extinct monumental languages, such as ancient Egyptian, Accadian, Babylonian, and Assyrian, forming a background to the history of language that cannot safely be neglected.

But that is not all. As soon as the student begins to deal not only with words, but with the things which they signify—and how can the two ever be separated?—he cannot safely ignore the mythology and folklore of the great nations of antiquity: he has to be conversant with their customs, their beliefs, their religious institutions, their ancient law, and finally, with their historic and prehistoric past.

Unless a student can appeal for help to recognized authorities on all these subjects, he is apt to make brilliant discoveries which explode at the slightest touch of the specialist, and on the other hand, to pass by facts which have only to be pointed out in order to disclose their significance and far-reaching importance. People are hardly aware of the benefit which every branch of science derives from the free and



generous exchange of ideas, particularly in our Universities, where everybody may avail himself of the advice and help of his colleagues, whether they warn him against yet impossible theories, or call his attention to a book or an article where the very point that interests him has been fully worked out and settled once for all.

To live and move in such an academic atmosphere, however, is given to few only; and, when it is impossible that a great scientific problem should be thrashed out by many flails on the same floor, the next best thing that can happen is that a scholar eminent in his own department, and who knows what sound learning means, should for once step boldly out of his own domain, and take an independent survey of the preserves of his neighbours. There is, no doubt, considerable risk to the bold adventurer. He is sure to be called an interloper, an ignoramus, a mere dilettante; but, whatever accidents he may meet with himself, the subject itself is sure to be benefited. Victor Hehn's excellent book, *Kulturpflanzen und Hausthiere in ihrem Uebergang aus Asien nach Griechenland und Italien* (fifth edition, 1885), has shown how much the history of botany and zoology may gain from a study of the annals of language, and the best among recent books on mythology, whether Greek, Roman, or German, testify to the complete revolution which the study of the Science of Language has wrought in a truly scholarlike study of classical myths and customs, by supplying the distant background from which the stream of Aryan mythology has sprung. It has often been said that a traveller who spends a few

days in a country observes things which never strike the residents, and it is quite intelligible that a man who once knows what it is to know anything thoroughly, should in surveying a new field see things which, from being too familiar, have failed to rouse the attention of the ordinary student.

I strongly felt the truth of this when reading a German book, published in 1894, under the title, *Vorgeschichte der Indo-Europäer*, by Rudolph von Jhering. The author's name stands pre-eminent among the jurists of Germany, and his recent death has left a gap which it will be difficult to fill. His whole life had been devoted to the study of ancient law, more particularly of Roman law, and it was the leading principle of all his brilliant researches to discover in everything that has become formal its original substance, in what seems unmeaning its true purpose, in what is irrational its original *raison d'être*.

This is the very principle that guides, or ought to guide, the student of language. He has always to try to discover in what is purely formal in language something that was in its origin full of life and meaning. He has to start with the conviction that there can be nothing in language that had not an intelligible purpose, that there is nothing that is now irregular that was not at first regular, nothing irrational that was not originally rational. The same principle has been applied with great success to the deciphering of ancient mythology and folklore, and it has long been felt that ancient laws and customs required the same treatment, and would often under such treatment disclose the working of

human reason even behind the tangled web of the most perplexing legal formalities.

Brought up in that school, or rather, having been the founder of that school of jurisprudence, Jhering was in his very element when he came to deal with the language, the laws, and customs of the Aryan speakers at large; and though his work will be criticized on many points by the scholar, he has pointed out and opened in it new avenues which are full of promise and light.

Jhering's book, which has aroused a deep interest in Germany, and is to appear in a French translation also, has as yet hardly been noticed at all in England, though the matters with which it chiefly deals have of late years formed the subject of a very heated controversy among English scholars. Who has not heard of the 'Home of the Âryas,' and of the original migration of the Aryan race from east to west or from west to east? Every kind of argument, chiefly derived from language, has been used to show that the Âryas must have started from Kohistan, from Armenia, from the Caucasus, from the Caspian Sea, from the Rokitno swamps in Russia, from the Danube or the Dnieper, from Germany, from Scandinavia, nay, from the North Pole<sup>1</sup>.

I myself was satisfied that the materials at our disposal would not justify us in saying more than that the home of the Âryas was 'somewhere in Asia.' But, while most scholars looked upon the migration of the Âryas, from whatever home they started, as one continuous progress, or as a journey from a common centre in two directions, one towards the south-east

<sup>1</sup> M. M., *Biographies of Words*, p. 107.

(Persia, India), the other towards the north-west (Asia Minor, Greece, Italy, Russia, Germany, and Gaul), Professor von Jhering takes an entirely new view, which may help to reconcile the conflicting views hitherto prevailing. He does not look upon the migration of the Âryas as one uninterrupted expedition; but he admits repeated migrations, repeated halts, and therefore not one, but several homes of the Âryas in different parts of Asia and Europe. He distinguishes at least three periods in the earliest history of the Aryan speakers. (1) That of their original home somewhere in Asia; (2) that of their wanderings towards the north-west and south-east; (3) that of their second home, or rather of the temporary settlement of the north-western branch of the Aryan family previous to their spreading over Europe.

The first may be called the *Aryan Period*, the second the *Period of the Migration*, the third the *Indo-European Period*. Each of these periods ought, he thinks, to have left its traces in the language, the customs, and the laws of the various branches of the Aryan family. The first period is, of course, reputed the lowest in the scale of civilization, if we can speak of civilization when there was as yet neither *civis* nor *civitas*. There is a fashion even in scientific research. At first when scholars were fascinated by finding a number of words shared by every one of the Aryan languages, and therefore belonging to a period before their first separation, and when some of these words were found to express things and institutions, not unknown even in modern times, the temptation was great to say, 'Look, how advanced

our Aryan ancestors were even at a time previous to the beginning of history, say 3000 or even 5000 B.C.'

If we find such a compound as *vis-pati* in Sanskrit, meaning lord of a *vis* or a clan, and again in Zend *vis-paiti*, and, what is more extraordinary, in Lithuanian *Wiesz-pats*, does it not follow that even before their first separation the Âryas had had their settlements (*vis*, Lat. *vicus*), and a recognized head for each, a *pati* or *πόσις*? Again, if one member of the south-eastern and one of the north-western branch share the same term for king, does it not follow that at that remote time they were governed by kings, that they were guided by monarchical principles, that they had a political life which rested on the recognition of royal authority in war and peace?

There came, however, a reaction. Does it follow, it was said, because we find *rec-s* in Latin, *râg* or *râg-an* in Sanskrit, *ri* in Irish; that, therefore, the Âryas in their primitive home recognized a king by the grace of God, a monarch, whether elected or hereditary, possessed of the power of enforcing laws, of declaring war, of acting as military leader, and as dispenser of the booty conquered by his soldiers?

Far from it, it was rejoined. *Rex*, if derived from a root *rag* or *arg*, meaning to lead (cf. *rigu*, straight), need not have been more than a guide or leader of his own clan; nay, the man who steers a vessel, a *gubernator*, might well have been called a *râg*. For this kind of uncertainty we must be prepared, both on the negative and on the positive side. Because Sanskrit *râg* may be translated by *rex*, it certainly does not follow that the royalty of the first

Aryan Home had any similarity to the royalty of Louis XIV. Professor Jhering himself leans rather towards the negative side, at least as far as the First Period is concerned. He is anxious to show that the state of civilization in the Aryan Home was low, in order to be able to contrast it all the better with the civilization that sprang up during the Aryan Migration, and, later still, in the Second Home, and finally in the various centres of national life in Europe.

He also warns us against a danger which has hardly any existence now, if, indeed, it ever had, of seeing in the hymns of the Rig-veda an image of the First Aryan Home, or on looking on the *Germania* of Tacitus as reflecting the state of the Indo-Europeans during their migrations, or while still dwelling together in their Second Home. Yet he forgets himself occasionally, and appeals to the Rig-veda and to Tacitus as containing a residuum at least of the earliest period of Aryan life. Here very great caution and tact are required. The social state of the Germans, as described by Tacitus, may contain a residuum of earlier institutions; but we should remember that Tacitus wrote with a purpose, and that he had eyes for the bright side of German life only, that he was in fact, consciously or unconsciously, pointing a lesson for the benefit of his Roman readers. Not everything that has a primitive savour need be a residuum, or, as it is often called, a survival of primitive realities.

Still, with this proviso of fallibility which all students of prehistoric subjects are bound to admit, illustrations, whether taken from the Rig-veda, or the Old Testament, from the Homeric poems or the

*Germania* of Tacitus, ought to be welcomed as throwing converging rays of light on what is by necessity full of obscurity. Even the customs and traditions of modern savages, whether in the Andaman Islands or in the Isle of Dogs, may now and then serve as parallels, and, so far, as explanations of what seems unintelligible in the sayings and doings of the ancient Âryas, if only we remember that, like Tacitus of old, modern observers also are very apt to see what they wish to see, whether for good or for evil.

If the possession of a name for king does not prove the existence of a royal monarchy, not even of crowns and sceptres and thrones, among the inhabitants of the First Aryan Home, neither does the occurrence of such a word as *pur* or *purî* in Sanskrit and of *πόλις* in Greek certify the existence, during the earliest period of Aryan history, of what we mean by a town. No doubt, *pura* is used in the epical Sanskrit in the sense of town, as in Hastinâpura and similar names; but *pur* in the Veda need not have been more than a stronghold, or even a stockade, or a barricaded place, particularly when we meet with such expressions as *âyasî pûr*, an iron *pur*, or a barrier made of some kind of metal. Even in such words as *ἀκρόπολις*, *πόλις* is clearly not more than a fortified place, a burg. If, therefore, Professor Jhering says that the name for town was unknown to the Âryas before their separation, he is not quite correct. The name was known, but of course its meaning was not yet what it became in later times. There was even another word, before the Aryan Separation, which afterwards came to mean

town, viz., vâstu, for instance, in Kapilavâstu, the reputed birthplace of Buddha, which is the Greek ἄστυ, whatever objections may be raised against it on phonetic grounds.

No doubt we learn from Sanskrit that vâstu, or vâstu, meant originally no more than a dwelling-place; but what else could the original name for a town have meant? *Town* itself meant etymologically no more than an enclosure, German *Zaun*, hedge, and even *Stadt* need not have meant more than a stabling, or a station. What the ancient *pur* was like in Aryan and even in later times, we have absolutely no means of knowing. The existence, however, of the word for house in Sanskrit, Greek, and Latin, *dama*, *δῶμος*, *domus*, shows that the abodes of the early Âryas, though made of wood, and not as yet of stone, were no longer mere tents; while the Greek title *δεσπότης*, corresponding to Sanskrit *dampati*, or *dams-pati*, *pater domus* or *pater familis*, allows us a glimpse of the slow development of houses and families into settlements and more or less organized political units.

The occurrence in the Veda of expressions such as *damê*, *damê* 'in every house,' would lead us to suspect the existence of clusters of houses, if not of streets, at least in Vedic homesteads. Again such common Aryan words as *vis*, *vesa*, which, as *oikos* in Greek, mean simply house, while the Latin *vicus* means village, show an advance beyond the mere stockade or the fortified mountain retreat, and enable us to perceive a certain progress in the organization of village communities under an officer called *vis-pati*, long before the First Aryan Separation had taken place.



Professor Jhering brings some new arguments in support of the belief that the First Aryan Home was somewhere in Asia, or, at all events, in a hot country. It had been pointed out by others that there are no common Aryan terms for stable, for hay or straw, and that, therefore, in all probability the early Âryas lived in a climate where stables and straw were not required, but where cows and sheep were able to live in winter also in the open air. The common name for cattle, *pasu* in Sanskrit and *pecus* in Latin, seems to have meant tied or tethered cattle, and its presence in the north-western and south-eastern branches shows at all events that the Âryas, before they separated, were not mere hunters, but kept their flocks together, either tethered or with the help of the dog, the earliest of domesticated animals, the *svan* in Sanskrit, the *κύων* and *canis* in Greek and Latin, the Gothic *hunds*, the Irish *cú*.

Professor Jhering brings forward another ingenious argument to show that the First Home of the Âryas was in a very hot climate, where people wore little or no clothing. Seeing, as he always does, in certain unintelligible features of Roman law a residuum of former intelligible customs, he points to the fact that Roman law requires a man who is about to search a house for stolen goods, to enter into the house naked, with nothing on beyond a *licium*—i. e. a skin round his loins (Gaj. iii. 193). That the reason of this cannot have been, as was formerly supposed, to prevent him from smuggling something into or out of the house, is shown by the fact that his companions and witnesses were not required to adopt the same costume. Professor Jhering sees in the retention of this attire one

of many reminiscences of a former period of history when everybody wore a *licium* and nothing else, that is, when the Âryas lived in a hot climate somewhere in Asia.

By itself this argument would seem hardly strong enough to support the conclusion, but it acquires considerable strength from analogous cases brought forward from Roman law by Professor Jhering. It was hardly necessary for him to attempt to localize the First Aryan Home more minutely. We know enough for all practical purposes, if we know that it was in a tropical climate, somewhere in Asia. But, as Professor Jhering discovers traces of its having been in a mountainous district, he goes on to place it on the northern slopes of the Hindukush, where others had placed it before. It may be quite true that nothing could be brought forward against this localization, but Professor Jhering does not always distinguish between what is plausible and what is absolutely certain. Nor does he command a complete view of all the evidence that has been or might be brought forward to modify or neutralize some of the evidence on which he relies. Thus, in arguing in support of the almost complete nakedness of the Âryas while in their First Home, he neglects the evidence in favour of more complete clothing supplied by such words as Sanskrit *vastra*, Latin *vestis*, Greek *ἔσθῃς*, Gothic *ga-vasjan*, and likewise by words for sewing, such as *suo*, *κασσω*, Sanskrit *sû* and *siv*, Gothic *siuja*. Here, as in other cases, Professor Jhering's remarks seem often more valuable by what they suggest than by what they actually prove.

It cannot be denied, for instance, that his idea, so

carefully worked out, that the Roman *ver sacrum* is a reminiscence of the first Aryan exodus, is extremely ingenious, and that, if it could fully be proved, which from the nature of the case is simply impossible, it would show that in the First Aryan Home the beginning of spring, or rather the vernal equinox, was the best time for undertaking migrations on a large scale, while summer and winter were assigned to temporary rest and the tending of cattle, and autumn to raids and warfare. Professor Jhering seems certainly to have supplied a truer explanation of the *ver sacrum* than even the Roman antiquaries possessed, and his account of the Aryan Migration, with the renewed severance of the young generations from a common stock, would help to explain many things even in the grammatical differentiation of the Aryan dialects, though one cannot help feeling that the materials with which we have to work are brittle, and could hardly resist the blast of a determined scepticism. What Professor Jhering has clearly proved, or at all events supported by new and valuable evidence, is the fact that the First Home of the Âryas was in a mountainous country, where agriculture on a large scale was impracticable, and where the natural mode of supporting life was that of shepherds, viz. breeding of animals, such as goats, cows, sheep, and, on a smaller scale, swine. This more or less nomadic life of shepherds was continued on the march from their First to their Second Home, and only terminated when the discovery of large agricultural areas, and possibly a more frequent contact with other races, had made them see the advantage of cereal combined with animal food, and of a more settled life amidst

the large acres which they had taken possession of, and which they had often to defend against hostile neighbours.

This Second Home, according to Professor Jhering, was in the southern parts of what is now called Russia (p. 7). The road by which the Âryas reached this country lay, according to him (p. 479), along the slopes of the Caucasus towards the Caspian Sea, where two tracts of land were open, that between the Volga and the Don, which was unattractive and sterile, and that between the Don, the Dnieper, and the Dniester, reaching as far as the Danube, which was tempting and almost forced the Âryas to adopt a more settled agricultural life. Here the still united north-western branch of the Âryas seems to have remained for several generations, speaking the language they had brought from their South-Eastern Home, though it probably began to be affected by local dialectic variety and possibly by the adoption of words from the people whom they had conquered and continued to hold in subjection. But even these vast and fertile tracts of arable land must have ceased at last to support the ever-growing population, particularly as, to judge from the evidence of the later national dialects, such as Greek, Latin, German, Slavonic, and Celtic, the art of manuring the land had not yet been discovered when the Âryas had reached the south-western borders of Europe. How important that discovery was considered may best be seen from the fact that the Romans actually invented a deity, Sterculius, to preside over the process of manuring. The plough too was probably not yet made of metal, but was no more than a large stick pointed like a pig's



snout and drawn through the land by men and women rather than by oxen or horses (p. 472).

When at last the time came for further movements, the soil having ceased to supply the necessary food and the overcrowded state of the homesteads causing, as usual, famine and epidemics, Professor Jhering concludes that the ancestors of the Greeks and Italians were the first to leave the Second Home, and to conquer for themselves the fertile land lying before them in Thrace, Asia Minor, Greece, and Italy. The next to follow were the Celts, who passed through central Europe, crossed the Rhine, and took possession of the beautiful fields and valleys west of that river; while the Germans, who came next, had to be satisfied with the less productive country east of the Rhine. Those who remained in the Second Aryan Home were the Slavs. When they tried to advance further west, they were repelled by the Germans, just as the Germans had been kept in check by the Celts. In every case the people who migrated were, according to Professor Jhering, the young men with their wives and herds, and hence the rapid change from the common language into the various national idioms, known to us as Greek, Latin, Celtic, German, and Slavonic. Even with us the young people at school and University have their own dialect, slang as we call it; but when, by the absence of the older generation, all checks on that juvenile slang were removed, the new dialect would soon be stamped with certain peculiarities, which in a short time became general and even classical. Another element of change lay probably in the contact with the original inhabitants conquered by the Aryan speakers. It is true, we know little or

nothing about them, but we can hardly imagine that Europe was entirely uninhabited at the time of the Aryan immigration. There are very frequent allusions to hostile races in Europe as well as in India after the Aryan conquerors had taken possession of the land, which show that the Âryas had to conquer and to defend their new homes.

Whatever the relations may be between conquerors and conquered, the contact between people speaking different languages has always proved one of the most powerful agencies in producing change of language. Latin, if it had been left entirely to itself, and had not been brought into contact with people speaking Etruscan, Celtic, and German dialects, would never have become so completely metamorphosed as we see it in Italian, French, and Spanish; or, at all events, its changes would have been less rapid and less violent. We know that in Sanskrit a limited number of words which resist all etymological analogies were borrowed from Dravidian sources: why should not words in Slavonic and German which baffle all attempts at reducing them to Aryan radicals be referred to a similar source? Why, at all events, should we invent impossible derivations when the existence of channels through which words of the indigenous races might have filtered into the language of the Âryas, has been clearly proved? It is one thing to say that all such words *must* have been derived from the previous inhabitants, and quite another that they *may* have been. To declare that whatever is inexplicable in the language and the mythology of the Âryas in India was borrowed from the aboriginal inhabitants is, of course, a very different thing; it is not only to

explain *ignotum per ignotum*, but *ignotum per ignotius*. It is right to keep this side door open, though it is wrong to use it on all occasions. However, the important point in Professor Jhering's theory is his recognition of the fact that the later national separations among the Âryas were caused not by invasions like those of the Huns and Vandals, but by well-organized emigration of the younger part of the ever-increasing Aryan population, by a repeated *ver sacrum*. This would explain the persistence of many of the elements of a former consolidation, and at the same time the rapid growth of new seeds in language, in customs, in religion, and in law.

We saw how, according to Professor Jhering's theory, the advance of the Âryas must have continued during many centuries. There were many halting-places between the Hindukush and the Caucasus, and there was a long rest in the so-called Second Home, in the southern parts of Russia.

There was unbroken continuity, and yet repeated new beginnings, as wave upon wave rolled on towards Asia Minor and Europe, and towards the shores of the Mediterranean Sea and Atlantic Ocean. This long migratory period ought, as Professor Jhering rightly observes, to have left some clear traces in the language and the customs of the Âryas, even after they had become settled and nationalized. And here lies Professor Jhering's real strength, namely, in discovering in customs which are utterly unmeaning and absurd, some former object (*Zweck*) which accounts for their origin. We saw already how he explained the *licium*, as a reminiscence of the earliest costume of the Âryas. The same applies to the well-known

*hasta praeusta*, the wooden spear, the point of which had to be burnt and dipped in blood before the Fetial priest, in declaring war, threw it into the enemy's country. Iron spears had long been known at Rome, but the old wooden weapon was retained in what was an ancient and solemn act. For the same reason the spear which was given to soldiers for distinguished bravery was a spear without iron, the *hasta pura*, a remnant of more ancient times, when no other spear was known except the poles that had served in the garden. Again, when an animal was to be killed by the Fetials in concluding an international treaty, the priest was not allowed to use an iron hatchet, such as was used by the ordinary butcher, but was ordered to find a hatchet made of *silex*, a stone hatchet, such as had been used in ancient times. It is well known that the Jews also retain the use of stone knives to the present day, both in performing circumcision and in building a stone altar.

There was a similar superstition at Rome with reference to the *Pons Sublicius*. That bridge stood under the special custody of the *Pontifices*, and in repairing it no nail made of metal was allowed to be used. Here again Professor Jhering discovers traces of an earlier state of civilization at Rome, when the old wooden bridge was looked upon as a sacred structure to be guarded by a college of priests (*Pontifices*), and to be kept as much as possible in its original state, fastened together by wooden nails; because at the time when it was first built no other nails were known. The same reverence for an ancient and, therefore, sacred custom restrained the Vestal Virgins from rekindling the fire in their temple by means of



flint and steel. The art of striking fire by striking flint against flint belongs to the Stone Age. But before that time fire was gained by *terebratio*, that is by boring and rubbing some easily inflammable piece of wood (*materia felix*) with a harder wood. The same method had to be adopted by the Vestal Virgins, though the vessel in which the spark had to be conveyed by them from the open air into the temple was allowed to be made of metal, was a *cribrum aereum*.

It was equally due to a religious regard for ancient custom that no member of the priesthood could be put to death with a metal hatchet. The priests retained for a long time the ancient privilege, if condemned to death, to be whipped or knouted to death—a privilege long kept up, it would seem, in Russia, the Second Aryan Home—and it is well known that the *fascēs* of the Roman lictors consisted of a number of rods cut from the birch or elm tree, and bound together with thongs. The axe (*securis*) was inserted amongst the rods, but its use within the walls of the city of Rome was narrowly restricted to certain occasions. Professor Jhering sees in all these customs the tenacity of the Romans in preserving whatever was old and venerable, even after it had lost its original purpose. Thus, long after the magistrates had introduced horn-signals for calling together their assemblies, the *comitia* of the Pontifices continued to be called together, in the original sense of the word, that is *viva voce*.

On the strength of these and similar indications of the continuance of ancient customs, even when there was no longer any excuse or necessity for them, Professor Jhering goes on to look for residua of customs

which admit of an explanation during a period of migration, preceding the settlement of the Italian tribes, but which in later times are nothing but hollow formalities or superstitions. If one remembers that *superstes* means what remains over, what remains alive, or survives other things, one feels almost tempted to explain *superstitio* in the sense of survival, or of something that is kept alive, though its original purpose is forgotten, and its real life gone.

We have already seen how the *Fetiales* retained the customs of early times in their wooden spears as used by shepherds, nor is it unlikely that their very name meant originally no more than breeders or shepherds from (*fétus*). In the same manner the *Pontifices* may have been originally real builders of bridges or experienced architects; for the art of building, and the equally important art of breaking up a bridge, was in ancient times, and particularly during a period of migration, a matter of such vital importance that those who understood it may well have been looked upon as a select fraternity, enjoying certain privileges, and endowed with a certain sanctity. To be able to cross a river on a bridge, and to break up such a bridge against a pursuing enemy would often decide a battle; nay, a war, and secure the annexation of fertile fields or pastures, and those who contributed to such a success are not likely to have forgotten their claims on the gratitude of the army and of the people at large. We saw before in the wooden bridge at Rome, with its wooden nails, a remnant of the earliest form of architecture, and Professor Jhering recognizes, even in the *Depontani*, the old sexagenarian people hurled from the bridge

into the Tiber, traces of an ancient custom of pacifying the river-god for the violence done to him in chaining him by a bridge. These human victims were afterwards replaced by the *argei*, or manikins, made of bulrushes.

That practical and eminently sensible people like the Romans should have allowed themselves to be guided in most critical moments by the flight of birds (*signa ex avibus*), the peculiarities of entrails (*signa ex extis*), and lastly by the appetite of fowls (*signa ex tripudiis*)—in other words, that they should have accepted and followed the advice of their *auspices* and *haruspices*, their *augures*, is, to say the least, very startling.

There is a great difference between these childish modes of divination and the prophecies of inspired persons, whether men or women, such as we find among the Jews, the Greeks, and the Germans. Wise people can often prophesy and predict events which must follow, and their prophecies were frequently warnings rather than predictions. There is nothing irrational in that, particularly when the voice of truth and justice had once been recognized as the voice of God. But to imagine that the voice of God should speak out of the entrails of animals, or out of the mouth of fowls, goes somewhat beyond the recognized limits of human folly. Some people imagine that by pointing out similar superstitions in other countries, more particularly among savage races, they have explained the whole matter. The fact is they have done nothing beyond making it plausible that customs springing up independently in widely distant countries, possessed originally some reasonable foundation,

but what that foundation was would remain as great a puzzle as ever. Professor Jhering grapples boldly with these problems. There must be a reason in all this unreason, he says; and he suggests that these superstitions find their explanation in the peculiar circumstances of the Aryan Migrations. He considers that these superstitions were all originally thoroughly practical institutions, and that they only assumed a superstitious or magical character after their original purely prophylactic intention had been forgotten. According to him the *servare de cœlo*, which took place at midnight, was the residuum of the weather observations which the leader of an expedition had to make during times of migration or of war, in order to judge from the clouds, winds, and distant thunder, whether the next morning would be fit for marching and for fighting, or whether the army should remain encamped. All the circumstances of these very simple meteorological observations were preserved in later times when they had lost their meaning, and when matters had gone so far that the mere fact of the magistrates ordering a *servare de cœlo* sufficed to make people suspect that they only wished, for quite different reasons, to postpone a public meeting *in alium diem*.

Besides the *signa de cœlo*, there were the *signa pedestria* which the augurs had to observe. There has been much discussion on the true meaning of these *signa pedestria*. Professor Jhering shows first of all that *signa pedestria* cannot possibly mean, as has often been supposed, signs taken from quadrupeds. *Pedester* never means a quadruped, but always refers to men going on foot, to infantry as opposed to

cavalry, &c. *Signa pedestria*, therefore, can only have been originally signs which concerned the foot-soldier on his journey, or dangers which threatened him in camp. These were, as Paulus Diaconus rightly remarks, serpents, wolves, foxes; but certainly not, as he adds, horses or other quadrupeds. That there should be with an advancing army scouts to see whether the country was infested by serpents, wolves, and even foxes is intelligible enough, for even foxes would be dangerous, particularly to the fowls which, as is well known, were always carried along with the army; but there was no necessity for looking out for horses or other quadrupeds, for they would always be welcome. The *signa pedestria*, as putting the soldiers on their guard against snakes, wolves, or foxes, were, therefore, as natural and practical in their first beginnings as the *signa ex cælo*, the observations of the sky taken from the raised tent of the leader. They did not become religious or magical till after their practical purpose had been forgotten.

If we ask what other dangers had to be guarded against by an army advancing into a perfectly unknown country, we should say that the chief dangers must have arisen from drinking contaminated water, or eating poisonous plants and berries. And if we ask how such dangers could be avoided, we can easily see that the poisonous character of grain and fruit could best be discovered by throwing them before fowls to eat, in order to see what the result would be; while the intestines of animals would likewise disclose to experienced eyes the salubrity or danger of the climate and the noxious or innocuous characters of the fodder supplied by the country.

That this is not a mere guess suggested by hygienic observations of modern times is best shown by a passage from Cicero (*De Div.* ii. 13-30), 'Habitū extorum et colore declarari censet—pabuli genus et earum rerum quas terra procreet, vel ubertatem vel tenuitatem, salubritatem etiam aut pestilentiam.' This kind of examination would have been absolutely necessary during times of conquest. Afterwards, when it had ceased to have this special object, it would no doubt have been in the interest of the haruspices to keep it up for the purpose of prognosticating good or evil events of a more general character. It would then have become the superstition such as we know it at Rome in historical times, a superstition not only absurd, but, as Cicero already remarked, neither decorous nor worthy of the gods. (Cicero *De Div.* i. 52-118), 'Non interesse deum singulis jecorum fissis aut avium cantibus, neque enim decorum est, nec diis dignum.'

After these four kinds of *signa* or *auspicia* have thus been traced back by Professor Jhering to an intelligible beginning, there remains but one class, the *signa ex avibus*, for which he has to establish a similar origin. Suppose, he says, that the Âryas in their onward march found their progress barred by a mountain chain which they could not possibly climb with their wives, children, and flocks, what were they to do? They might know that there are hardly any mountains without some passes, whether made by water or other natural agencies. But how were they to discover the exact situation of such passes? If the country was inhabited, some of the inhabitants, no doubt, might serve as guides. But



if the country was uninhabited, or hostile, nothing remained but to watch the flight of birds. It is a fact that birds in their annual migrations always pass mountains at their lowest elevation, and a careful observation of their flight might therefore have proved the best means of discovering a mountain pass, and thus rescuing a whole expedition from possible defeat and ruin. And if birds proved themselves in the earliest times guides and saviours of the Âryas in their advance from east to west, from south to north, we can better understand how they retained in later times the character of saving guides and sacred protectors, though we need not be surprised that the augurs themselves should occasionally have smiled at the superstitions which grew up from these very natural and sensible beginnings. Possibly *Picus* the son of *Saturnus*, and grandfather of *Latinus*, was originally one of the birds that guided the Latins; the woodpecker, sacred to Mars. 'Pici, Martio nomine insignis et in auspicatu magni' (*Plin.* x. 18, 20).

It need hardly be said that Professor Jhering, as an experienced pleader, has given to his theory a much more captivating aspect than it can possibly have in the form of a short abstract as here given. So far as his linguistic facts are concerned, he acknowledges his indebtedness to other scholars. It seems that his principal, and often his only authority is Schrader's book, *Sprachvergleichung und Urgeschichte*. Fortunately, he has gone to a safe book. The facts contained in that work have been carefully collected, but the process by which they were obtained, the controversies out of which they emerged, the arguments for or against them advanced by those

who were the first to discover them, are naturally absent. Hence we miss occasionally the firm step of the real scholar, and the clear eye which can command a complete survey of the large and complicated subject of Linguistic Archaeology. Professor Jhering perceives quickly what supports his theory; but he does not always see what has been or what may be adduced against it. What, however, is most valuable in his book are his own new and original ideas, his ingenious combinations and his bold guesses. These will offer the most useful materials for students of language, whether on other points they agree with or differ from his conclusions.

There is one portion of his book which has not been mentioned yet, and which, to do it full justice, should be treated by itself. It is the theory put forward and carefully worked out by the author, that the *Âryas*, with all their good qualities, would never have gone beyond the civilization that is within the reach of shepherds and cultivators of the soil—would never, in fact, have reached their eminence in political and commercial life, in art, science, and literature, unless they had been brought in contact with Semitic races, and had received from them the germs of what is meant by real civilization. How that contact came about, at what time, and in what country the *Âryas* could have been influenced by the Semites, is one of the most difficult of historical or prehistorical problems. Professor Jhering holds that the earliest focus of all civilized life must be looked for in Babylon, and that it reached the rest of the world through two channels—the Egyptian and the Phœnician. He seems inclined to admit even an



earlier and more immediate contact between the speakers of Semitic and Aryan speech. He points out five words:—

## PROTO-ARYAN.

staura  
karna  
laiwa, lyawa  
gharata  
waina

## PROTO-SEMITIC.

taura, *bull.*  
karnu, *horn.*  
labiatu, libatu, *lion.*  
harudu, *gold.*  
wainu, *wine.*

Some of these words, however, are clearly Aryan, and must, therefore, have been borrowed by the Semites from the Âryas, not vice versa, as Professor von Jhering supposes. The Sanskrit *sthûra* (not *staura*) means etymologically strong, and is related to the root *sthâ*, to stand. *Karna* in Sanskrit means ear and not horn, but it may be distantly related to *siras*, head, *sringa*, *horn*, *képas* and *cornu*. The names of lion, of gold, and of wine have all been traced back more or less clearly to Aryan roots. They are words of which we can hardly imagine that they were formed independently by Semitic and by Aryan speakers, and it would be curious indeed if the builders of Babylonian palaces had borrowed the name of gold from Aryan shepherds. It is true that many scholars set great store on these common words as proving the presence of the Âryas in close proximity to the Semitic sphere of influence in Asia, but as there is sufficient evidence without them to prove that the First Home of the Âryas was in Asia and not in Europe, it seems better to discard this doubtful evidence than to see it demolished by our opponents.

Besides this prehistoric contact between Semitic

and Aryan people, Professor Jhering thinks he can prove the outflow of early Babylonian civilization through the two channels of Phoenician commerce and Egyptian political supremacy. The general truth of this theory will probably be admitted at present by most scholars, but it is strange to see how little of what can be called real historical proof can be adduced in support of it. Greek mythology has preserved the name of *Cadmus* as a Phoenician schoolmaster, the teacher of the Cadmean alphabet, and thus, no doubt, the herald of a higher civilization in Greece. Thebes in Bœotia may have been a Phoenician colony, nay, Kadmus may be the Greek form under which *Kedem*, the East, was personified in Greek tradition. Not only in the alphabet, but in measures and weights, in the rules of marriage and inheritance, in the customs of war and hospitality (p.44), Phoenician influences<sup>1</sup> have been detected. Nor can we doubt that in the islands of Crete, Cyprus, and on the coasts of Greece, some Phoenician deities were grafted on earlier Greek gods and goddesses. *Mylitta* and *Astarte* may have been recognized in *Hêrê* and *Aphrodîtê*, nay, may have been worshipped in their very temples; but, for all that, we must never forget that *Hêrê* and *Aphrodîtê* were of Greek origin, and existed long before the advent of Phoenician merchants in Greece.

Professor Jhering is led by his own independent observations to suppose that the civilization of Egypt was derived from Babylonia. He claims the discovery of the baking of bricks for Babylon, and he

<sup>1</sup> Gerhard, *Griechische Mythologie*, par. 54, p. 3. Jhering, *Gastfreundschaft im Alterthum*, in *Deutsche Rundschau*, 1887, p. 357.

recognizes in the bricks of the oldest Egyptian pyramids the influence of that powerful kingdom. He could not have been aware that Professor Hommel has produced very strong evidence to show that even the Egyptian hieroglyphics were derived from a Babylonian source, so that the march of the Greek alphabet was really from Babylon to Egypt, from Egypt to Phoenicia, and finally from Phoenicia to Greece and to the whole world.

The reason why Professor Jhering looks upon the Babylonian as the earliest civilization of the human race is a very curious one, and one may well say of it, *se non è vero, è ben trovato*. He thinks that the absence of stone for building purposes forced the Babylonians to build their houses at first of mud and clay, and that this would inevitably have led to the discovery of making real bricks, whether with the help of the heat of the sun or of fire. It is impossible to give more than a short abstract (see p. 267) of Professor Jhering's really brilliant speculation on this subject, and of the way by which he traces back the whole of Babylonian civilization to the scarcity of stone and the presence of clay in the country of the two rivers.

The use of building materials of a definite shape led, he thinks, to a more careful way of building, from mere piling up of stones to the art of building according to a preconceived plan, and this measuring and counting of bricks would by necessity become the foundation of the sciences of arithmetic and geometry. This has been fully confirmed by the Vedic *Sulva-sûtras*. Building itself would become an art, the oldest of the fine arts.

The easy production of manageable building materials in the shape of bricks would naturally lead to the erection of clusters of houses, of whole streets and towns, and in consequence to the erection of fortifications to secure the town and its treasures against the attacks of hostile tribes. To keep such a town in working order would require a certain political organization, a police for the protection against dangerous elements within, an army for the protection against dangerous elements from without. It is only by the necessities arising from a large number of people having their houses within the same walls, and their possessions exposed to the same dangers, that the idea of a commonwealth could arise, and with it the first attempts at legislation, taxation, and other branches of government.

Clay proved of even greater importance in the onward march of civilization as a writing material, in the shape of baked tablets and cylinders. This material was more handy, and yet more lasting than stone, and its first practical use seems to have been for legal contracts and treaties, whether between individuals or between towns and states. It had one other advantage which could hardly have been foreseen, but has proved most important to the historian. Whereas inscriptions on metal or marble have tempted conquerors to destroy them and to use the materials for different purposes, mere clay tablets could be of no value except to the persons concerned, and have thus survived historical shipwrecks in which everything else was destroyed and lost.

If we look upon the Phoenicians and Egyptians as the pupils of the Babylonians, we can understand how



the former, having learnt the art of river-navigation from the inhabitants of the Mid-river country, brought it to the highest perfection in their coasting trade, and afterwards in their more distant voyages of discovery in the Mediterranean, the Red Sea, and the Persian Gulf. These distant expeditions made the study of the stars a matter of prime necessity. The Babylonians first used the dove as a pilot to guide them to places where they could land. The dove of Noah was of Babylonian origin. Their landings and settlements on various coasts made them see the usefulness—nay, necessity of an institution which changed the stranger, that is the *hostis*, into a friend, that is a *hospes*, and they established, therefore, not only the *tessera hospitalis*, the *σύμβολον* by which members of befriended families in distant parts of the world might recognize each other for generations, but they spread also the worship of the Ζεὺς ἑννιος in many parts of the world as the divine protector of the rights and privileges of hospitality.

Their commercial relations with foreign nations caused a rapid spreading of a knowledge of the alphabet and of the art of writing and reading in every country where they established their dépôts. They were the first to make written commercial contracts and afterwards political treaties with different people, and they thus succeeded in inspiring even half-barbarous tribes with a feeling that there existed higher interests than those of their own narrow homes. Though at first this feeling may have been supported by commercial interests only, it led in the end to what we now call the *Jus gentium*, and to the recognition of the rights of humanity abroad and at home. The

great Phoenician merchants invented not only the idea of simple interest by which people were enabled to share in the profits of more enterprising merchants, receiving a fixed *usura*, that is, a payment due for the use of their capital, but there is clear evidence that they also invented what in Roman law was called the *foenus nauticum* or the *pecunia trajectitia*, that is, a share in the profits and losses of a ship chartered by a company. Here, as the risk was greater, the profits also were naturally larger. In some of the tablets published by Oppert and Menant (*Documents juridiques de l'Assyrie*, 1877, p. 19) we find the earliest legal provisions on commercial law and maritime insurance. The principle, that if the merchant is shipwrecked, the shareholders have no claim on his estate, is clearly recognized.

The same principle prevails in Roman law, which ordains 'ut merces ex ea pecunia comparatae . . . periculo creditoris navigent,' and it is quite possible that Greek merchants may have adopted the principle that *foenus una cum mercatore perit* from the Phoenicians, the Romans from the Greeks. Professor Jhering sees in these Babylonian regulations of the *foenus nauticum* a clear proof that, like the Phoenicians, the ancient Babylonians also were not afraid of long sea voyages. It may be so, but even navigation to the mouths of the Tigris and Euphrates might have called similar regulations into existence. What, however, Professor Jhering has certainly proved is that, whether for river or sea navigation, the Phoenicians had been the pupils of the Babylonians, and had learnt from them not only their astronomy and the use of doves as pilots, but likewise the regu-

lations of *usura* or usury for large commercial enterprises, whether by land or by sea.

It seems strange that the people who invented interest and credit should not have invented coined money also. Yet so it is. So far as I am aware, no native coins have as yet been found in the ruins of Babylon or Nineveh. The people must have fixed the relation between gold, silver, and copper once for all, and have been satisfied afterwards with weighing pieces of these precious metals against one another according to a fixed ratio. The discovery of coined money was made in Lydia, and afterwards perfected by the Greeks on the islands, in Asia Minor, and in Europe.

According to Professor Jhering the influence of Phoenicia, and indirectly of Babylonia, extended not only to the North-western branch of the Âryas, to Greeks, Italians, and afterwards to Germans and Celts, but may be traced even in the South-eastern branch, that is to say, in Persia and India. It is well known that scholars who hold that the fleets manned by the servants of Hiram and Solomon, which on their return from Ophir brought back gold and plenty of algum trees and precious stones, while the navy of Tarshish brought likewise silver, ivory, apes, and peacocks, see in the names of some of these articles traces of Sanskrit and Dravidian words. It is true also that these articles themselves are nowhere found together except in India. But all this would only prove that the Phoenicians carried away something from India, not that the inhabitants of India learnt at the same time something useful from the Phoenicians. There are no traces of direct Phoenician influence in the alphabets, the astronomy, the weights and measures

of India; and the idea that the Panis who in the Veda are represented as dangerous and treacherous merchants were the *Poeni* or *Puni* of later history cannot be considered as more than a clever hypothesis. There is no Kadmus, no Thebes, no Astarte or Melikertes to be found in the ancient traditions of India. Not even the astronomy of the Vedic era, with its Nakshatras or lunar stations, has as yet been traced to a Semitic source, though many attempts have been made to show that, like the Greeks, the Hindus also were the pupils of Semitic astronomers. In this utter absence of traces of Phoenician or Babylonian influences in the ancient times of India, Professor Jhering ought therefore to have been more cautious before accepting the identification of the Vedic word *manâ* with the Phoenician *mna*, the Attic *mina*, corresponding to a hundred drachmas. The similarity is tempting, but fallacious. In such matters one case is really none, for it would be difficult to explain why, when no other word from the Semitic treasury found admittance into Sanskrit, this one should have acquired a free pass. Besides, it admits now of hardly any doubt that in the only passage in the Rig-veda where this word *manâ* occurs, it cannot mean a *mina*, but that it stands in the accusative dual in the sense of two ornaments, one for each arm. *Sakâ* in the same passage does not mean *una cum*, but *simul*, and the instrumental after it would be, to say the least, anomalous. Whatever the future may have in store for us, in the present state of our knowledge it is very important to remember that there is not a single trace of Semitic influence in the earliest period of Indian history.



Valuable and suggestive as this posthumous work undoubtedly is, it would have been still more so if Professor Jhering had been allowed to finish it. Of the seven books of which he had sketched a plan, the sixth and seventh are wanting altogether. They were to have treated of the origin of the European nations, and of the branching off of the various European branches from their common stem. In some of the earlier books also there are large gaps, and in spite of all the care taken by the editor, Dr. Victor Ehrenburg, there are unmistakable signs of unfinished elaboration. Still, even as a torso, Professor Jhering's book has been most welcome, not only to the students of comparative philology and mythology, but to archaeologists, whether historic or prehistoric, and most of all to the students of Roman Law and its remote Aryan antecedents.

## KANT'S CRITIQUE OF PURE REASON<sup>1</sup>.

KANT'S Critique of Pure Reason has been my constant companion through life. It drove me to despair when I first attempted to read it, as a mere schoolboy. At the University I worked hard at it under Weisse, Lotze, and Drobisch at Leipzig, and my first literary attempts in philosophy, now just forty years old, were essays on Kant's Critique. Having once learnt from Kant what man can and what he cannot know, my plan of life was very simple, namely, to learn, so far as literature, tradition, and language allow us to do so, how man came to believe that he could know so much more than he ever can know in religion, in mythology, and in philosophy. This required special studies in the field of the most ancient languages and literatures. But though these more special studies drew me away for many years towards distant times and distant countries, whatever purpose or method there may have been in the work of my life, was due to my beginning life with Kant.

Even at Oxford, whether I had to lecture on German literature or on the Science of Language, I have often, in season and out of season, been preaching Kant; and nothing I have missed so much,

<sup>1</sup> *Extracts from Preface to my Translation (Macmillan, 1881).*

when wishing to come to an understanding on the great problems of life with some of my philosophical friends in England, as the common ground which is supplied by Kant for the discussion of every one of them. We need not be blind worshippers of Kant, but if for the solution of philosophical problems we are to take any well defined stand, we must, in this century of ours, take our stand on Kant. Kant's language, and by language I mean more than mere words, has become the *Lingua franca* of modern philosophy, and not to be able to speak it, is like studying ancient philosophy, without being able to speak Aristotle, or modern philosophy, without being able to speak Descartes. What Rosenkranz, the greatest among Hegel's disciples, said in 1838, is almost as true to-day as it was then: *Engländer, Franzosen und Italiener müssen, wenn sie vorwärts wollen, denselben Schritt thun, den Kant schon 1781 machte. Nur so können sie sich von ihrer dermaligen schlechten Metaphysik und den aus einer solchen sich ergebenden schlechten Consequenzen befreien.*

It is hardly necessary at the present day to produce any arguments in support of such a view. The number of books on Kant's philosophy, published during the last century in almost every language of the world<sup>1</sup>, speaks for itself. There is no single philosopher of any note, even among those who are decidedly opposed to Kant, who has not acknowledged his pre-eminence among modern philosophers. The great systems of Fichte, Schelling, Hegel, Herbart,

<sup>1</sup> During the first ten years after the appearance of the *Critique*, three hundred publications have been counted for and against Kant's philosophy. See Vaihinger, *Kommentar*, i. p. 9.

and Schopenhauer branched off from Kant, and now, after a century has passed away, people begin to see that those systems were indeed mighty branches, but that the leading shoot of philosophy was and still is—Kant. No truer word has lately been spoken than what, I believe, was first said by Professor Weisse<sup>1</sup>, in the Philosophical Society at Leipzig, of which I was then a member, and was again more strongly enforced by my friend and former colleague, Professor Liebmann of Strassburg, that, if philosophy wishes to go forward, it must go back to Kant. *Il faut reculer, pour mieux sauter*. Lange, in his *History of Materialism*, calls Kant the Copernicus of modern philosophy; aye, Kant himself was so fully conscious of the decentralizing character of his system that he did not hesitate to compare his work with that of Copernicus<sup>2</sup>. But if Kant was right in his estimate of his own philosophy, it cannot be denied that, with but few, though memorable exceptions, philosophy in England is still Ante-Copernican. How little Kant is read by those who ought to read him, or how little he is understood by those who venture to criticize him, I never felt so keenly as when, in a controversy which I had some time ago with one of the most illustrious of English philosophers, I was told that space could not be an *a priori* intuition, because we may hear church-bells, without knowing where the belfry stands. Two philosophers, who both have read Kant's Critique, may differ from each other diametrically, but they will at least understand each other. They will not fire at each other like some of

<sup>1</sup> See Julius Walter, *Zum Gedächtniss Kant's*, p. 28.

<sup>2</sup> See Supplement II, vol. i. p. 370.

the German students who, for fear of killing their adversary, fire their pistols at right angles, thus endangering the life of their second rather than that of their adversary.

This will explain why, for a long time, I have felt personally called upon to place the classical work of Kant within the reach of all philosophical readers in England, and in such a form that no one could say any longer that he could not construe it. I thought for a time that Professor Caird's excellent work *On the Philosophy of Kant*, had relieved me of this duty. And, no doubt, that work has told, and has opened the eyes of many people in England and in America to the fact that, whatever we may think of all the outworks of Kant's philosophy, there is in it a central thought which forms a real rest and an entrenched ground on the onward march of the human intellect.

But it is a right sentiment after all, that it is better to read a book than to read about it, and that, as my friend Stanley used to preach again and again, we should never judge of a book, unless we have read the whole of it ourselves. I therefore pledged myself to finish a new translation of Kant's Critique as my contribution to the celebration of its centenary, and though it has taken more time and more labour than I imagined, I do not think my time or my labour will have been wasted, if only people in England, and in America too, will now read the book that is a hundred years old, and yet as young and fresh as ever.

It is curious that in these days when the idea of development, which was first elaborated by the students of philosophy, language, and religion, and afterwards applied with such brilliant success to the study of

nature also, should now receive so little favour from the very sciences which first gave birth to it. Long before we heard of evolution in nature, we read of the dialectical evolution of thought, and its realization in history and nature. The history of philosophy was then understood to represent the continuous development of philosophical thought, and the chief object of the historian was to show the necessity with which one stage of philosophical thought led to another. This idea of *rational development*, which forms a far broader and safer basis than that of *natural development*, is the vital principle in the study of the human mind, quite as much, if not more, than in the study of nature. A study of language, of mythology, of religion, and philosophy, which does not rest on the principle of development, does not deserve the name of a science. The chief interest which these sciences possess, is not that they show us isolated and barren facts, but that they show us their origin and growth, and explain to us how what is, was the necessary result of what was. In drawing the stemma of languages, mythological formations, religious beliefs, and philosophical ideas, science may go wrong, and often has gone wrong. So have students of nature in drawing their stemmata of plants, and animals, and human beings. But the principle remains true, for all that. In spite of all that seems to be accidental or arbitrary, there is a natural and intelligible growth in what we call the creations of the human mind, quite as much as in what we call the works of nature. The one expression, it may be said, is as mythological as the other, because the category of substance cannot apply to



either nature or mind. Both, however, express facts which must be explained; nay, it is the chief object of science to explain them, and to explain them genetically. Is Aristotle possible or intelligible without Plato? Is Spinoza possible or intelligible without Descartes? Is Hume possible or intelligible without Berkeley? Is Kant possible or intelligible without Hume? These are broad questions, and admit of one answer only. But if we have once seen how the broad stream of thought follows its natural bent, flows onward, and never backward, we shall understand that it is as much the duty of the science of thought to trace unbroken the course of philosophy from Thales to Kant, as it is the duty of natural science to trace the continuous development of the single cell to the complicated organism of an animal body, or the possible metamorphosis of the Hipparion into the Hippos.

What I wanted, therefore, as an introduction to my translation of Kant's *Critique*, was a pedigree of philosophical thought, showing Kant's ancestors and Kant's descent. Here, too, Professor Caird's work seemed to me at one time to have done exactly what I wished to see done. Valuable, however, as Professor Caird's work is on all sides acknowledged to be, I thought that an even more complete list of Kantian ancestors might and should be given, and (what weighed even more with me), that these ancestors should be made to speak to us more in their own words than Professor Caird has allowed them to do.

At my time of life, and in the midst of urgent work, I felt quite unequal to that task, and I there-

fore applied to Professor Noiré who, more than any other philosopher I know, seemed to me qualified to carry out that idea. Kant's philosophy, and more particularly the antecedents of Kant's philosophy, had been his favourite study for life, and no one, as I happened to know, possessed better materials than he did for giving, in a short compass, the *ipsissima verba* by which each of Kant's ancestors had made and marked his place in the history of thought. Professor Noiré readily complied with my request, and supplied a treatise which I hope will fully accomplish what I had in view.

If, then, while making allowance for differences of opinion on smaller points, we have convinced ourselves that Kant is the last scion of that noble family of thinkers which Professor Noiré has drawn for us with the hand of a master, what follows? Does it follow that we should all and on all points become Kantians, that we should simply learn his philosophy, and be thankful that we know now all that can be known about the Freedom of the Will, the Immortality of the Soul, and the Existence of God? Far from it. No one would protest more strongly than Kant against what he himself calls 'learning philosophy,' as opposed to 'being a philosopher.' All I contend for is that, in our own modern philosophy, the work once for all done by Kant can be as little ignored as the work done by Hume, Leibniz, Berkeley, Locke, Spinoza, and Descartes. I do not deny the historical importance of the Post-Kantian systems of philosophy, whether of Fichte, Schelling, Hegel, Herbart, or Schopenhauer in Germany, of Cousin in France, or of Mill in England. But most of these philosophers



recognized Kant as their spiritual father<sup>1</sup>. Even Comte, ignorant as he was of German and German philosophy, expressed his satisfaction and pride when he discovered how near he had, though unconsciously, approached to Kant's philosophy<sup>2</sup>. Some years ago I ventured to point out that, as far as I could judge, amid the varying aspects of his philosophical writings, Mr. Herbert Spencer also, in what he calls his Transfigured Realism, was not very far from Kant's fundamental position. Mr. Herbert Spencer, however, has repudiated what I thought the highest compliment that could be paid to any writer on philosophy, and I feel bound therefore to withdraw my conjecture.

<sup>1</sup> Julius Walter, *Zum Gedächtniss Kant's*, p. 27.

<sup>2</sup> 'J'ai lu et relu avec un plaisir infini le petit traité de Kant (*Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht*, 1784) ; il est prodigieux pour l'époque, et même, si je l'avais connu six ou sept ans plus tôt, il m'aurait épargné de la peine. Je suis charmé que vous l'ayez traduit, il peut très-efficacement contribuer à préparer les esprits à la philosophie positive. La conception générale ou au moins la méthode y est encore métaphysique, mais les détails montrent à chaque instant l'esprit positif. J'avais toujours regardé Kant non-seulement comme une très forte tête, mais comme le métaphysicien le plus rapproché de la philosophie positive. . . . Pour moi, je ne me trouve jusqu'à présent, après cette lecture, d'autre valeur que celle d'avoir systématisé et arrêté la conception ébauchée par Kant à mon insu, ce que je dois surtout à l'éducation scientifique ; et même le pas le plus positif et le plus distinct que j'ai fait après lui me semble seulement d'avoir découvert la loi du passage des idées humaines par les trois états théologique, métaphysique, et scientifique, loi qui me semble être la base du travail dont Kant a conseillé l'exécution. Je rends grâce aujourd'hui à mon défaut d'érudition ; car si mon travail, tel qu'il est maintenant, avait été précédé chez moi par l'étude du traité de Kant, il aurait, à mes propres yeux, beaucoup perdu de sa valeur.' See *Auguste Comte*, par É. Littré, Paris, 1864, p. 154 ; Lettre de Comte à M. d'Eichthal, Déc. 10, 1824.

But although, whether consciously or unconsciously, all truly important philosophers have, since the publication of the *Critique of Pure Reason*, been more or less under the spell of Kant, and indirectly of Hume and Berkeley also, this does not mean that they have not asserted their right of reopening questions which seemed to be solved and settled by those heroes in the history of human thought. Only, if any of these old problems are to be taken up again, they ought at least to be taken up where they were last left. Unless that is done, philosophy will become a mere amusement, and will in no wise mark the deep vestiges in the historical progress of the human intellect. There are anachronisms in philosophy, quite as much as in other sciences, and the spirit in which certain philosophical problems have of late been treated, both in England and in Germany, is really no better than a revival of the Ptolemaic system would be in astronomy. No wonder, therefore, that in both countries we should meet with constant complaints about this state of philosophical anarchy. Mr. Challis, in an article in the *Contemporary Review* (November, 1881), writes: 'It is another familiar fact, a much more important one, that the present state of philosophy is exactly parallel to the present state of theology,—a chaos of conflicting schools, each able to edify itself without convincing any other, every one regarding all the rest, not as witnesses against itself, but as food for dialectical powder and shot. The impartial bystander sees no sign that we are now nearer to agreement than in the days of Varro; though the enthusiast of a school expects the world to be all

some day of his opinion, just as the enthusiast of a sect believes vaguely in an ultimate triumph of his faith.'

Exactly the same complaint reaches us from the very country where Kant's voice was once so powerful and respected, then was silenced for a time, and now begins to be invoked again for the purpose of restoring order where all seems confusion. 'Since the year 1840,' writes Dr. Vaihinger, 'there has been hopeless philosophical anarchy in Germany. There were the disciples of Schelling, Hegel, Herbart, and Schopenhauer, and, by their side, the founders and defenders of many unknown systems of philosophy. Then followed the so-called Real-Idealists, or Ideal-Realists, who distilled a philosophical theism out of the pantheism of greater thinkers, and, as their antipodes, the Materialists, who on the new discoveries of natural science founded the saddest, shallowest, and emptiest system of philosophy<sup>1</sup>.'

In England and America, even more than in Germany, I believe that a study of Kant holds out the best hope of a philosophical rejuvenescence. In Germany a return to Kant is a kind of *Renaissance*; in England and America Kant's philosophy, if once thoroughly understood, will be, I hope, a new birth. No doubt there are, and there have been in every country of Europe, some few honest students who perfectly understood Kant's real position in the onward march of human thought. But to the most fertile writers on philosophy, and to the general public at large, which derives its ideas of philosophy

<sup>1</sup> Vaihinger, *Zum Jubiläum von Kant's Kritik der reinen Vernunft*, p. 11.

from them, Kant's philosophy has not only been a *terra incognita*, but the very antipodes of what it really is. Mr. Watson, in his instructive work, *Kant and his English Critics*, is perfectly right when he says that, till very lately, Kant was regarded as a benighted *a priori* philosopher of the dogmatic type, afflicted with the hallucination that the most important part of our knowledge consists of innate ideas, lying in the depths of consciousness, and being capable of being brought to the light by pure introspection.' That Kant was the legitimate successor of Hume on one side, and of Berkeley on the other, was hardly conceived as possible. And thus it has happened that English philosophy, in spite of the large number of profound thinkers and brilliant writers who have served in its ranks during the last hundred years, has not yet risen above the level of Locke and Hume. No one can admire more than I do the dashing style in which some of the most popular writers of our time have ridden up to the very muzzles of the old philosophical problems, but if I imagine Kant looking back from his elevated position on those fierce and hopeless onslaughts, I can almost hear him say what was said by a French general at Balaclava: *C'est magnifique, — mais ce n'est pas la guerre*. Quite true it is that but for Hume, and but for Berkeley, Kant would never have been, and philosophy would never have reached the heights which he occupies. But, after Kant, Hume and Berkeley have both an historical significance only. They represent a position which has been conquered and fortified, and has now been deliberately left behind.

Leaving therefore the task of tracing minutely the intimate relation between Kant and his predecessors to the more experienced hand of Professor Noire, I shall here be satisfied with pointing out in the broadest way the connexion, and, at the same time, the diametrical opposition between Kant and those two great heroes of speculative thought, Berkeley and Hume.

Berkeley holds that all knowledge that seems to come to us from without through the senses or through experience is mere illusion, and that truth exists in the ideas of the pure understanding and of reason only.

*if fair  
he really  
doesn't*

Kant proves that all knowledge that comes to us from pure understanding and from pure reason only is mere illusion, and that truth is impossible without experience.

*no?  
no  
no*

Hume holds that true causality is impossible, whether in experience or beyond experience.

Kant proves that experience itself is impossible without the category of causality, and, of course, without several other categories also which Hume had overlooked, though they possess exactly the same character as the concept of causality<sup>1</sup>. The gist of Kant's philosophy, as opposed to that of Hume, can be expressed in one line: That without which experience is impossible, cannot be the result of experience, though it must never be applied beyond the limits of possible experience.

*namely  
no*

<sup>1</sup> This is Kant's statement, though it is not quite accurate. See Adamson, *On the Philosophy of Kant*, p. 202. That Kant knew Hume's *Treatise on Human Nature* seems to follow from Hamann's *Metakritik über den Purismus der reinen Vernunft*, p. 3, n.

Such broad statements and counter-statements may seem to destroy the finer shades of philosophical thought, yet in the end even the most complicated and elaborate systems of philosophy rest on such broad foundations; and what we carry about with us of Plato or Aristotle, of Descartes or Leibniz, consists in the end of little more than a few simple outlines of the grand structures of their philosophical thoughts. And in that respect no system admits of being traced in simpler and broader outlines than that of Kant. Voluminous and complicated it is, and yet Kant himself traces in a few lines the outcome of it, when he says (*Critique*, p. 712 (830)): 'But it will be said, is this really all that pure reason can achieve, in opening prospects beyond the limits of experience? Nothing more than two articles of faith? Surely even the ordinary understanding could have achieved as much without taking counsel of philosophers!'

'I shall not here dwell on the benefits,' he answers, 'which, by the laborious efforts of its criticism, philosophy has conferred on human reason, granting even that in the end they should turn out to be merely negative. On this point something will have to be said in the next section. But, I ask, do you really require that knowledge, which concerns all men, should go beyond the common understanding, and should be revealed to you by philosophers only? The very thing which you find fault with is the best confirmation of the correctness of our previous assertions, since it reveals to us, what we could not have grasped before, namely, that in matters which concern all men without distinction, nature cannot be accused of any partial distribution of her gifts; and

that, with regard to the essential interests of human nature, the highest philosophy can achieve no more than that guidance which nature has vouchsafed even to the meanest understanding.'

I hope that the time will come when Kant's works, and more particularly his *Critique of Pure Reason*, will be read, not only by the philosopher by profession, but by everybody who has once seen that there are problems in this life of ours the solution of which alone makes life worth living. These problems, as Kant so often tells us, are all the making of reason, and what reason has made, reason is able to unmake. These problems represent in fact the mythology of philosophy, that is, the influence of dying or dead language on the living thought of each successive age; and an age which has found the key to the ancient mythology of religion, will know where to look for the key that is to unlock the mythology of pure reason. Kant has shown us what can and what cannot be known by man. What remains to be done, even after Kant, is to show how man came to believe that he could know so much more than he can know, and this will have to be shown by a *Critique of Language*<sup>1</sup>.

How strange it is that Kant's great contemporary,

<sup>1</sup> What I mean by this, may be seen in the last Lecture of the Second Series of my *Lectures on the Science of Language*, delivered in 1867 (ed. 1880, ii. p. 612 seq.); in my article 'On the Origin of Reason,' *Contemporary Review*, February, 1878; my Lectures on Mr. Darwin's Philosophy of Language, *Fraser's Magazine*, May, 1873; also in Professor Noire's work, *Der Ursprung der Sprache*, 1877; and *Max Müller and the Philosophy of Language* (Longmans, 1879). One important problem, in the solution of which I differ from Kant, or rather give a new application to Kant's own principles, has been fully treated in my *Hibbert Lectures*, 1878, p. 30 seq.

'the Magus of the North,' should have seen this at once, and that for a whole century that thought has remained dormant. 'Language,' Hamann writes, 'is not only the foundation for the whole faculty of thinking, but the central point also from which proceeds the misunderstanding of reason by herself.' And again<sup>1</sup>: 'The question with me is not, What is Reason? but, What is Language? And here I suspect is the ground of all the paralogisms and antinomies with which Reason has been charged.' And again: 'Hence I feel almost inclined to believe that our whole philosophy consists more of language than of reason, and the misunderstanding of numberless words, the prosopopœias of the most arbitrary abstraction, the antitheses τῆς ψευδωνύμου γνώσεως; nay, the commonest figures of speech of the *sensus communis* have produced a whole world of problems, which can no more be raised than solved. What we want is a *Grammar of Reason*.'

That Kant's *Critique* will ever become a popular book, in the ordinary sense of the word, is impossible; but that it will for ever occupy a place in the small tourist's library which every thoughtful traveller across this short life's journey will keep by his side, I have no doubt. Kant, it must be admitted, was a bad writer, but so was Aristotle, so was Descartes, so was Leibniz, so was Hegel; and, after a time, as in climbing a mountain, the very roughness of the road becomes an attraction to the traveller. Besides, though Kant is a bad builder, he is not a bad architect, and there will be few patient readers of the *Critique* who will fail to understand Goethe's expression that

<sup>1</sup> Gildemeister, *Hamann's Leben und Schriften*, iii. p. 71.



on reading Kant, or rather, I should say, on reading Kant again and again, we feel like stepping into a lighted room. I have tried hard, very hard, to remove some of the darkness which has hitherto shrouded Kant's masterwork from English readers, and though I know how often I have failed to satisfy myself, I still hope I shall not have laboured quite in vain. Englishmen who, in the turmoil of this century, found leisure and mental vigour enough to study once more the thoughts of Plato, and perceived their bearing on the thoughts of our age, may well brace themselves to the harder work of discovering in Kant the solution of many of the oldest problems of our race, problems which, with most of us, are still the problems of yesterday and of to-day. I am well aware that for Kant there is neither the prestige of a name, such as Plato, nor the cunning of a translator, such as Jowett. But a thinker who in Germany could make himself listened to during the philosophical apathy of the Wolfian age, who from his Ultima Thule of Königsberg could spring forward to grasp the rudder of a vessel, cast away as unseaworthy by no less a captain than Hume, and who has stood at the helm for more than a century, trusted by all whose trust was worth having, will surely find in England, too, patient listeners, even though they might shrink, as yet, from embarking in his good ship in their passage across the ocean of life.

We live in an age of physical discovery, and of complete philosophical prostration, and thus only can we account for the fact that physical science, and, more particularly, physiology, should actually have

grasped at the sceptre of philosophy. Nothing, I believe, could be more disastrous to both sciences.

No one who knows my writings will suspect me of undervaluing the progress which physical studies have made in our time, or of ignoring the light which they have shed on many of the darkest problems of the mind. Only let us not unnecessarily move the old landmarks of human knowledge. There always has been, and there always must be, a line of demarcation between physical and metaphysical investigations, and though the former can illustrate the latter, they can never take their place. Nothing can be more interesting, for instance, than recent researches into the exact processes of sensuous perception. Optics and Acoustics have carried us deep into the inner workings of our bodily senses, and have enabled us to understand what *we* call colours and sounds, as vibrations, definite in number, carried on from the outer organs through vibrating media to the brain and the inmost centre of all nervous activity. Such observations have, no doubt, made it more intelligible, even to the commonest understanding, what metaphysicians mean when they call all secondary qualities subjective, and deny that anything can be, for instance, green or sweet, anywhere but in the perceiving subject. But the idea that these physical and physiological researches have brought us one inch nearer to the real focus of subjective perception, that any movement of matter could in any way explain the simplest sensuous perception, or that behind the membranes and nerves we should ever catch hold of what we call the soul, or the I, or the self, need only to be stated to betray its utter folly. That men like Helmholtz and

Du Bois-Reymond should find Kant's metaphysical platform best adapted for supporting their physical theories is natural enough. But how can any one who weighs his words say that the modern physiology of the senses has in any way supplemented or improved Kant's theory of knowledge<sup>1</sup>? As well might we say that spectrum analysis has improved our logic, or the electric light supplemented our geometry. 'Empirical psychology,' as Kant says, 'must be entirely banished from metaphysic, and is excluded from it by its very idea<sup>2</sup>.'

Metaphysical truth is wider than physical truth, and the new discoveries of physical observers, if they are to be more than merely contingent truths, must find their appointed place and natural refuge within the immovable limits traced by the metaphysician. It was an unfortunate accident that gave to what ought to have been called pro-physical, the name of metaphysical science, for it is only after having mastered the principles of metaphysic that the student of nature can begin his work in the right spirit, knowing the horizon of human knowledge, and guided by principles as unchangeable as the pole star. It would be childish to make this a question of rank or precedence; it is simply a question of work and order.

It may require, for instance, a greater effort, and display more brilliant mental qualities, to show that nature contains no traces of repeated acts of special creation, than to prove that such a theory would make all unity of experience, and consequently

<sup>1</sup> See Noiré, in *Die Gegenwart*, June 23, 1881.

<sup>2</sup> *Critique*, p. 728 (848).

all science, impossible. But what are all the negative arguments of the mere observer without the solid foundation supplied by the metaphysician? And with how much more of tranquil assurance would the geologist pursue his observations and develop his conclusions, if he just remembered these few lines of Kant: 'When such an arising is looked upon as the effect of a foreign cause, it is called *creation*. This can never be admitted as an event among phenomena, because its very possibility would destroy unity of experience<sup>1</sup>.'

What can have been more delightful to the unprejudiced observer than the gradual diminution of the enormous number of what were called by students of nature, who had never troubled their heads about the true meaning of these terms, genera and species? But when the true meaning, and thereby the true origin, of genera and species was to be determined, is it not strange that not one word should ever have been said on the subjective character of these terms? Whatever else a genus or species may be, surely they are, first of all, concepts of the understanding, and, without these concepts, whatever nature might present to us, nothing would ever be to us a genus or a species.

Now the genus and species, in that restricted sense, as applied to organic beings, represent only one side of that fundamental process on which all thought is founded, namely, the conception of the General and the Special. Here, again, a few pages of Kant<sup>2</sup> would have shown that the first thing to be

<sup>1</sup> *Critique*, p. 180 (206).

<sup>2</sup> *Ibid.*, p. 559 (p. 652 seq.).

explained is the process by which we conceive the genus or the general, and that the only adequate explanation of it is what Kant calls its transcendental deduction, i.e. the proof that, without it, experience itself would be impossible; and that therefore, so far from being a concept abstracted from experience, it is a *sine qua non* of experience itself.

If this is once clearly understood, it will be equally understood that, as we are the makers of all concepts, we are also the makers of *genera and species*, and that long before logicians came to define and deface these terms, they were what we now are anxious to make them again, terms for objects which have either a common origin, or a common form. Long before Aristotle forced the terms *γένος* and *εἶδος* to assume a subordinate relation to each other, language, or the historical logic of the human race, had formed these terms, and meant them to be co-ordinate.

*Genos* meant *kin*, and the first *genos* was the *gens* or the family, comprehending individuals that could claim a common ancestor, though differing in appearance as much as a grandfather and a babe. *Eidos* or *species*, on the contrary, meant appearance or form, and the first *eidos* was probably the troop of warriors, comprehending individuals of uniform appearance, nothing being asserted as to their common origin. This was the historic or prehistoric beginning of these two fundamental categories of thought—and what has the theory of evolution really done for them? It has safely brought them back to their original meaning. It has shown us that we can hold together, or comprehend, or conceive, or classify, or generalize or speak in two ways, and in two ways only—either by common

descent (genealogically), or by common appearance (morphologically). Difference of form is nothing, if we classify genealogically, and difference of descent is nothing, if we classify morphologically. What the theory of evolution is doing for us is what is done by every genealogist, aye, what was done in ancient time by every paterfamilias, namely, to show by facts that certain individuals, however different from each other in form and appearance, had a common ancestor, and belonged therefore to the same family or kin. In every case where such proof has been given, we gain in reality a more correct general concept, i.e. we are able to think and to speak better. The process is the same, whether we trace the Bourbons and Valois back to Hugo Capet, or whether we derive the Hippos and the Hipparion from a common ancestor. In both cases we are dealing with facts and with facts only. Let it be established that there is no missing link between them, or between man and monkey, and we shall simply have gained a new concept, as we should gain a new concept by establishing the unbroken continuity of the Apostolic succession. Only let us see clearly that in physical and historical researches, too, we are dealing with facts, and with facts only, which cannot excite any passion, and that the wider issues as to the origin of genera and species belong to a different sphere of human knowledge, and after having been debated for centuries, have been determined once for all by Kant's *Critique of Pure Reason*.

If one remembers the dust-clouds of words that were raised when the question of the origin of species was mooted once more in our days, it is

truly refreshing to read a few of Kant's calm pages on that subject, written one hundred years ago. 'Reason'<sup>1</sup>, he writes, 'prepares the field for the understanding,

'1st. Through the principle of *homogeneousness* of the manifold as arranged under higher genera;

'2ndly. Through the principle of the *variety* of the homogeneous in lower species; to which,

'3rdly, it adds a law of *affinity* of all concepts, which requires a continual transition from every species to every other species, by a gradual increase of diversity. We may call these the principles of *homogeneousness*, of *specification* and of *continuity* of forms.'

And with reference to the practical application of these metaphysical principles to the study of nature, he writes again with true philosophical insight<sup>2</sup>: 'I often see even intelligent men quarrelling with each other about the characteristic distinctions of men, animals, or plants, nay, even of minerals, the one admitting the existence of certain national characteristics, founded on descent, or decided and inherited differences of families, races, &c., while others insist that nature has made the same provision for all, and that all differences are due to accidental environment. But they need only consider the peculiar character of the matter, in order to understand that it is far too deeply hidden for both of them to enable them to speak from any real insight into the nature of the object. It is nothing but the twofold interest of reason, one party cherishing the one, another party the other, or pretending to do so. But this difference of the two

<sup>1</sup> *Critique*, p. 564 (657).

<sup>2</sup> *Ibid.*, p. 572 (667).

maxims of manifoldness and unity in nature, may easily be adjusted, though as long as they are taken for objective knowledge they cause not only disputes, but actually create impediments which hinder the progress of truth, until a means is found of reconciling the contradictory interests, and thus giving satisfaction to reason.

‘The same applies to the assertion or denial of the famous law of the *continuous scale* of created beings, first advanced by Leibniz, and so cleverly trimmed up by Bonnet. It is nothing but a carrying out of the principle of affinity resting on the interest of reason, for neither observation nor insight into the constitution of nature could ever have supplied it as an objective assertion. The steps of such a ladder, as far as they can be supplied by experience, are far too wide apart from each other, and the so-called small differences are often in nature itself such wide gaps, that no value can be attached to such observations as revealing the intentions of nature, particularly as it must always be easy to discover certain similarities and approximations in the great variety of things. The method, on the contrary, of looking for order in nature, according to such a principle, and the maxim of admitting such order (though it may be uncertain where and how far) as existing in nature in general, is certainly a legitimate and excellent regulative principle of reason, only that, as such, it goes far beyond where experience or observation could follow it. It only indicates the way which leads to systematical unity, but does not determine anything beyond.’

I know, of course, what some of my philosophical



friends will say. 'You speak of thoughts,' they will say; 'we speak of facts. You begin with the general, we begin with the particular. You trust to reason, we trust to our senses.' Let me quote in reply one of the most positive of positive philosophers, one who trusts to the senses, who begins with the particular, and who speaks of facts. Condillac, in his famous *Essai sur l'Origine des Connaissances humaines*, writes: 'Soit que nous nous élevions, pour parler métaphoriquement, jusque dans les cieus, soit que nous descendions dans les abîmes, nous ne sortons pas de nous-mêmes; et ce n'est jamais que notre pensée que nous apercevons.' This was written in 1746.

And what applies to these, applies to almost all other problems of the day. Instead of being discussed by themselves, and with a heat and haste as if they had never been discussed before, they should be brought back to the broader ground from which they naturally arise, and be treated by the light of true philosophy and the experience gained in former ages. There is a solid ground formed by the thoughts of those who came before us, a kind of intellectual *humus* on which we ourselves must learn to march on cautiously, yet safely; without needing those high stilts which seem to lift our modern philosophers above the level of Locke, and Hume, and Kant, and promise to enable them to advance across the unknown and the unknowable with wider strides than were ever attempted by such men as Faraday, or Lyell, or Darwin; but which invariably fall away when they are most needed, and leave our bold speculators to retrace their steps as best they can.

I.

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Whether we rise ourselves, to spend  
metaphorically to the Heaven, or descend  
the abyss, we never leave ourselves

If my translation of Kant were intended for a few professional philosophers only, I should not feel bound to produce any credentials in his favour. But the few true students of philosophy in England do not want a translation. They would as little attempt to study Kant, without knowing German, as to study Plato, without knowing Greek. What I want, and what I hope for, is that that large class of men and women whose thoughts, consciously or unconsciously, are still rooted in the philosophy of the last century, and who still draw their intellectual nutriment from the philosophical soil left by Locke and Hume, should know that there is a greater than Locke and Hume, though himself the avowed pupil and the truest admirer of those powerful teachers. Kant is not a man that requires testimonials; we might as well require testimonials of Plato or Spinoza. But to the English reader it may be of interest to hear at least a few of the utterances of the great men whose merit it is to have discovered Kant, a discovery that may well be called the discovery of a new world.

What Goethe said of Kant, we have mentioned before. Schiller, after having declared that he was determined to master Kant's *Critique*, and if it were to cost him the whole of his life, says: 'The fundamental ideas of Kant's ideal philosophy will remain a treasure for ever, and for their sake alone we ought to be grateful to have been born in this age.'

Strange it is to see how orthodox theologians, from mere laziness, it would seem, in mastering Kant's doctrines, raised at once a clamour against the man who proved to be their best friend, but whose last years of life they must needs embitter. One of the most

religious and most honest of Kant's contemporaries, however, Jung Stilling, whose name is well known in England also, quickly perceived the true bearing of the *Critique of Pure Reason*. In a letter, dated March 1, 1789, Jung Stilling writes to Kant: 'You are a great, a very great instrument in the hand of God. I do not flatter—but your philosophy will work a far greater, far more general, and far more blessed revolution than Luther's Reform. As soon as one has well comprehended the *Critique of Reason*, one sees that no refutation of it is possible. Your philosophy must therefore be eternal and unchangeable, and its beneficent effects will bring back the religion of Jesus to its original purity, when its only purpose was—holiness.'

Fichte, no mean philosopher himself, and on many points the antagonist of Kant, writes: 'Kant's philosophy will in time overshadow the whole human race, and call to life a new, more noble, and more worthy generation.'

Jean Paul Friedrich Richter speaks of Kant 'not only as a light of the world, but as a whole solar system in one.'

With more suppressed, yet no less powerful appreciation Wilhelm von Humboldt writes of him: 'Some things which he demolished will never rise again; some things which he founded will never perish again. A reform such as he carried through is rare in the history of philosophy.'

Schopenhauer, the most fearless critic of Kant's *Critique*, calls it 'the highest achievement of human reflection.' What he has written of Kant is indispensable indeed to every student of the *Critique*, and

I deeply regret that I could not have added to my translation of Kant a translation of Schopenhauer's critical remarks.

I must add, however, one paragraph: 'Never,' Schopenhauer writes in his *Purerga* (1183), 'never will a philosopher, without an independent, zealous, and often repeated study of the principal works of Kant, gain any idea of this most important of all philosophical phenomena. Kant is, I believe, the most philosophical head that nature has ever produced. To think with him and according to his manner is something that cannot be compared to anything else, for he possessed such an amount of clear and quite peculiar thoughtfulness as has never been granted to any other mortal. We are enabled to enjoy this with him, if, initiated by patient and serious study, we succeed, while reading the profoundest chapters of the *Critique of Pure Reason*, in forgetting ourselves and thinking really with Kant's own head, thus being lifted high above ourselves. If we go once more through the *Principles of Pure Reason*, and, more particularly, the *Analogies of Experience*, and enter into the deep thought of the synthetical unity of apperception, we feel as if lifted miraculously and carried away out of the dreamy existence in which we are here lost, and as if holding in our hands the very elements out of which that dream consists.'

If, in conclusion, we look at some of the historians of modern philosophy, we find Erdmann, though a follower of Hegel, speaking of Kant as 'the Atlas that supports the whole of German philosophy.'

Fortlage, the Nestor of German philosophers<sup>1</sup>, who

<sup>1</sup> He died November, 1881.

wrote what he calls a *Genetic History of Philosophy since Kant*, speaks of him in the following terms: 'In one word, Kant's system is the gate through which everything that has stirred the philosophical world since his time, comes and goes. It is the universal exchange where all circulating ideas flow together before they vanish again in distant places. It is the London of philosophy, sending its ships into every part of the world, and after a time receiving them back. There is no place in the whole globe of human thought which it has not visited, explored, and colonized.'

In more homely language Professor Caird expresses much the same idea of Kant's philosophy, when he says (p. 120): 'So much has Kant's fertile idea changed the aspect of the intellectual world, that there is not a single problem of philosophy that does not meet us with a new face; and it is perhaps not unfair to say, that the speculations of all those who have not learned the lesson of Kant, are beside the point.'

Dr. Vaihinger, who has devoted his life to the study of Kant, and is now bringing out a commentary in four volumes on his *Critique of Pure Reason*<sup>1</sup>, sums up his estimate in the following words: 'The *Critique* is a work to which, whether we look to the grandeur of conception, or the accuracy of thought, or the weight of ideas, or the power of language, few only can be compared—possibly Plato's *Republic*, Aristotle's *Metaphysics*, Spinoza's *Ethics*—none, if we consider their lasting effect, their penetrating and far-reaching

<sup>1</sup> *Commentar zu Kant's Kritik der reinen Vernunft, zum hundertjährigen Jubiläum derselben, herausgegeben von Dr. H. Vaihinger. Stuttgart, 1881.*

with all  
which "grandeur"  
of conception, accuracy  
of ideas are not supposed

influence, their wealth of thought, and their variety of suggestions<sup>1</sup>.

Nearly the same judgement is repeated by Vacherot<sup>2</sup>, who speaks of the *Critique* as 'un livre immortel, comme l'*Organum* de Bacon et le *Discours de la Méthode* de Descartes,' while Professor Noiré, with his wider sympathies for every sphere of intellectual activity, counts six books, in the literature of modern Europe, as the peers of Kant's *Critique*, viz. Copernicus, *De revolutionibus orbium cœlestium* (1543); Descartes, *Meditationes de prima philosophia* (1641); Newton, *Principia philosophiæ naturalis mathematica* (1687); Montesquieu, *Esprit des Lois* (1748); Winckelmann, *Geschichte der Kunst des Alterthums* (1764); and Adam Smith, *Inquiry into the nature and causes of the Wealth of Nations* (1776)—but he places Kant's *Critique* at the head of them all.

I have called Kant's philosophy the *Lingua Franca* of modern philosophy, and so it is; and I hope will become so still more. But that *Lingua Franca*, though it may contain many familiar words from all languages of the world, has yet, like every other language, to be learnt. To expect that we can understand Kant's *Critique* by simply reading it, would be the same as to attempt to read a French novel by the light of English and Latin. A book which Schiller and Schopenhauer had to read again and again before they could master it, will not yield its secrets at the first time of asking. An Indian proverb says that

<sup>1</sup> *Zum Jubiläum von Kant's Kritik der reinen Vernunft*, von H. Vaihinger; Separatabdruck aus der Wochenschrift *Im neuen Reich*, 1881, No. 23, p. 14.

<sup>2</sup> *Revue des deux Mondes*, 1879, Août.



it is not always the fault of the poet, if a blind man cannot see it, nor is it always the fault of the profound thinker, if his language is unintelligible to the busy crowd. I am no defender of dark sayings, and I still hold to an opinion for which I have often been blamed, that there is nothing in any science that cannot be stated clearly, if only we know it clearly. Still there are limits. No man has a right to complain that he cannot understand higher mathematics, if he declines to advance step by step from the lowest to the highest stage of that science. It is the same in philosophy. Philosophy represents a long toil in thought and word, and it is but natural that those who have toiled long in inward thought should use certain concepts, and bundles of concepts, with their algebraic exponents, in a way entirely bewildering to the outer world. Kant's obscurity is owing partly to his writing for himself rather than for others, and partly to his addressing himself, when defending a cause, to the judge, and not to the jury. He does not wish to persuade, he tries to convince. No doubt there are arguments in Kant's *Critique* which fail to convince, and which have provoked the cavils and strictures of his opponents. Kant would not have been the really great man he was, if he had escaped the merciless criticism of his smaller contemporaries. But herein too we perceive the greatness of Kant, that those hostile criticisms, even where they are well founded, touch only on less essential points, and leave the solidity of the whole structure of his philosophy unimpaired. No first perusal will teach us how much of Kant's *Critique* may safely be put aside as problematical, or, at all events, as not essential. But with

every year, and with every new perusal, some of these mists and clouds seem to vanish, and the central truth is seen rising before our eyes with constantly increasing warmth and splendour, like a cloudless sun in an Eastern sky.

And now, while I am looking at the last lines that I have written, it may be the last lines that I shall ever write on Kant, the same feeling comes over me which I expressed in the Preface to the last volume of my edition of the Rig-veda and its ancient commentary. I feel as if an old friend, with whom I have had many communings during the sunny and during the dark days of life, was taken from me, and I should hear his voice no more.

The two friends, the Rig-veda and Kant's *Critique of Pure Reason*, may seem very different, and yet my life would have been incomplete without the one as without the other.

The bridge of thoughts and sighs that spans the whole history of the Aryan world has its first arch in the Veda, its last in Kant's *Critique*. In the Veda we watch the first unfolding of the human mind as we can watch it nowhere else. Life seems simple, natural, childlike, full of hopes, undisturbed as yet by many doubts or fears. What is beneath, and above, and beyond this life is dimly perceived, and expressed in a thousand words and ways, all mere stammerings, all aiming to express what cannot be expressed, yet all full of a belief in the real presence of the Divine in Nature, of the Infinite in the Finite. Here is the childhood of our race unfolded before our eyes, at least so much of it as we shall ever know on Aryan ground—and there are lessons to be read in those



hymns, aye, in every word that is used by those ancient poets, which will occupy and delight generations to come.

And while in the Veda, we may study the childhood, we may study in Kant's *Critique of Pure Reason* the perfect manhood of the Aryan mind. It has passed through many phases, and every one of them had its purpose, and has left its mark. It is no longer dogmatical, it is no longer sceptical, least of all is it positive. It has arrived at and passed through its critical phase, and in Kant's *Critique* stands before us, conscious both of its weakness and of its strength, modest, yet brave. It knows what the old idols of its childhood and of its youth too were made of. It does not break them, it only tries to understand them but it places above them the Ideals of Reason—no longer tangible—not even within reach of the understanding—yet real, if anything can be called real—bright and heavenly stars to guide us even in the darkest night.

In the Veda we see how the Divine appears in the fire, and in the earthquake, and in the great and strong wind which rends the mountain. In Kant's *Critique* the Divine is heard in the still small voice—the Categorical Imperative—the I Ought—which Nature does not know and cannot teach. Everything in Nature is or is not, is necessary or contingent, true or false. But there is no room in Nature for the Ought, as little as there is in Logic, Mathematics, or Geometry. Let that suffice, and let future generations learn all the lessons contained in that simple word, I ought, as interpreted by Kant.

I feel I have done but little for my two friends, far

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less than they have done for me. I myself have learnt from the Veda all that I cared to learn, but the right and full interpretation of all that the poets of the Vedic hymns have said or have meant to say, must be left to the future. What I could do in this short life of ours was to rescue from oblivion the most ancient heirloom of the Aryan family, to establish its text on a sound basis, and to render accessible its venerable Commentary, which, so long as Vedic studies last, may be criticized, but can never be ignored.

The same with Kant's *Critique of Pure Reason*. I do not venture to give the right and full explanation of all that Kant has said or has meant to say. I myself have learnt from him all that I cared to learn, and I now give to the world the text of his principal work, critically restored, and so translated that the translation itself may serve as an explanation, and in some places even as a commentary of the original. The materials are now accessible, and the English-speaking race, the race of the future, will have in Kant's *Critique* another Aryan heirloom as precious as the Veda—a work that may be criticized, but can never be ignored.

## COINCIDENCES<sup>1</sup>.

IT was towards the end of the sixteenth century that Filippo Sassetti<sup>2</sup>, an Italian merchant settled at Goa, felt startled at the coincidences which he could not help observing between his own language, Italian, and the vernaculars which he heard spoken all around him by the natives of India. He noted several of them, such as the numerals from 6 to 9, the words for *god* and for *serpent*; but being absorbed in business he only expressed his regret that he was not able to follow up this curious subject, *bellissime cose*, as he called it.

It was in 1845<sup>3</sup> that two Roman Catholic missionaries, Huc and Gabet, while travelling in Tibet felt startled at the coincidences between their own ecclesiastic ritual and that of the Buddhist priesthood in Tibet. They pointed out, among other things, the crosier, the mitre, the dalmatic, the cope, the service with two choirs, the psalmody, exorcism, the use of censers held by five chains which shut and open by themselves, blessings given by the Lamas in extending their right hand over the heads of the faithful,

<sup>1</sup> A Paper read before the Royal Society of Literature, May 27, 1896.

<sup>2</sup> *Lettere edite e inedite di Filippo Sassetti* (Firenze, 1855).

<sup>3</sup> *Souvenirs d'un Voyage dans la Tartarie, le Thibet, et la Chine pendant les années 1844, 1845, et 1846.* Par M. Huc, Prêtre-Missionnaire (Paris, 1850).

the use of beads for saying prayers, the celibacy of the priesthood, spiritual retreats, worship of saints, fastings, processions, litanies, holy water—enough, it would seem, to startle any Roman Catholic missionary.

These coincidences were so extraordinary, nay, so revolting, in the eyes of Christian missionaries, that the only way to account for them seemed to be to ascribe them to the devil, who wished to scandalize pious Roman Catholics who might visit Tibet, and to that spirit of mischief they were accordingly ascribed. Sassetti's attitude was more reasonable, and his words leave the impression on our mind that he really suspected something behind these *bellissime cose*; in fact, that the coincidences which he observed did not seem to him mere casual or diabolic coincidences, but something that required a rational or historical explanation.

Still, there the matter rested till the time came when the ancient language of the Brâhmans, which Sassetti knew to be called *Sanscruta*, began to be seriously studied by such men as Wilkins, Sir William Jones, and Colebrooke. They too could not help seeing what had struck Sassetti, and we know that Colebrooke made a long list of words<sup>1</sup> which seemed to him identically the same in Greek, Latin, German, Persian, and Sanskrit. But he attempted no explanation of the facts. At that time the idea that all languages were derived from Hebrew was still so prevalent and so firmly rooted that it would have required great courage to suggest any other explanation. The great philosopher, Dugald Stewart, though

<sup>1</sup> *Chips from a German Workshop*, iii. p. 499.

he did not go quite so far as the Roman Catholic missionaries, by declaring the similarities between Sanskrit, Greek, and Latin to have been the work of the devil, expressed his conviction that they must be the result of fraud, and that the wily Brâhmans had probably put together what they called their sacred language in imitation of Greek and Latin. He might have strengthened his argument by saying that *Sanskrita* means literally 'put together,' though it did not mean that when applied to the ancient language of India. It was a German scholar, Frederick Schlegel, who was the first to form and to enunciate the bold synthesis that the classical languages of Greece and Italy and the sacred language of India must be offshoots of one and the same stem, branches of one and the same family of speech. He thus accustomed philosophers to the new, and at that time most startling, idea that there was a real linguistic relationship between the dark inhabitants of India and the speakers of Latin and Greek, other branches being added afterwards to what we now call the *Aryan family of speech*, namely the *Persian*, the *Teutonic*, the *Slavonic* and *Celtic* branches.

Here we see the difference between coincidences and coincidences. We speak of undesigned, of strange coincidences; nay, we call it a mere coincidence if the same or a very similar event happens in different places or at different times. Most people would probably have called it a mere coincidence if they saw a Buddhist priest in Tibet wearing the same ecclesiastical vestments as a Roman Catholic priest at Rome. But as soon as we can account for such similarities, either as the result of borrowing on one side or the

other, or as the result of natural and intelligible causes, we should hardly call them any longer coincidences.

There are coincidences between languages not held together by any organic relationship. The Samoyedes, for instance, when they are smitten or in love with a Samoyede beauty, say that they are *amuru*, while the French, though they do not say *amuru*, say *amoureux*. This is a mere coincidence without any rhyme or reason. I have collected a number of such fortuitous coincidences in my *Science of Language*, vol. ii. p. 352. They are curious, but no more, unless they can be accounted for either rationally or historically. To Philippo Sassetti, the coincidences between Italian and Sanskrit words were simply curious, to Frederick Schlegel they were full of meaning, and they became the foundation of a new science, the Science of Language, and of a new philosophy, the Science of Thought. They are like signposts that may lead the traveller and explorer either to rich Eldorados or into a barren desert.

We have seen thus far that there are two classes of coincidences—those which we have a right to expect, and those which we have no right to expect. Our common human nature and our common natural surroundings are sufficient to account for many coincidences, such as, for instance, that both the ancient Brâhmans and the modern Australians get fire by rubbing two sticks till they ignite, and that they catch the sparks in some kind of tinder. To many people it was a surprise to see this strange process of producing fire among tribes who had never been in historical contact. Why should people have come to

think that two pieces of dry wood rubbed together would produce fire? It is by no means an easy process, and any one who tried it would probably fail. How then, it was asked, should savages have made that discovery? The answer is very simple. When during a storm two branches of a tree were seen to catch fire by constant friction, the human race would have been as stupid as the beasts of the field, if they had not tried to learn the lesson which nature taught them, how to produce fire, whenever it was wanted, by means of friction. I am not aware whether this discovery of fire has been claimed for some of the higher animals also. So many things of late have been claimed for them, why not this?

As yet I can only find one old-world story in support of such a belief. We read in one of the Buddhist Jâtakas (vol. i, No. 36) that once upon a time, when Brahmadatta was reigning at Benares, a large number of birds were living together in a tree. One day, as the boughs of this tree were grinding one against the other, dust began to fall, soon followed by smoke. Then one of the birds said: 'If these two boughs go on grinding against one another they will produce fire,' and he advised instant flight, with the result that the wise birds escaped, while the foolish birds came to grief.

Here we seem to catch the first glimmering of human reason in the animal brain. Unfortunately, or fortunately, the bird who thus reasoned and spoke, was the Buddha, that is the *Awakened* in a former birth, that is, he was just what other birds are not.

Again, if we are told that both in South America and in Siam there are family rejoicings on the day

when a child receives a name, we can well understand that the day on which a name was given to a child, and he was recognized as a new member of a family or a clan or a tribe, should have given rise to gatherings and festivities, human nature being the same everywhere. We need not imagine that our christening parties were copied in Siam, or that they were introduced by Buddhists from Siam to England. In fact, it may be laid down as a general principle, that if people separated from each other in time and space agree in what can be proved to be reasonable, no further explanation is required. But if coincidences are pointed out in matters which are or seem to be unreasonable, we have a right to ask for an explanation. Now whatever we may think of mitres, copes, crosiers, and all the rest, we can hardly say that they are rational. This does not mean that they are contrary to reason, but simply that at present their reason has been forgotten, that they are petrified things, and that if we find mitres, copes, dalmatics and crosiers in other countries, as, for instance, in Tibet, we cannot, as in the case of the fire-sticks, appeal to natural causes to account for the presence of the same or even very similar ecclesiastical vestments in the church of Rome and in the temple of Buddha at Lhassa in Tibet. Unless we appeal to the devil, the very representative of unreason, we must appeal to history till we find a channel through which these purely ceremonial or traditional oddities could have travelled from Rome to Tibet. It would be mere sophistry to say that there was originally a reason for a mitre, for a cope, for a crosier, and for rosaries. No doubt there was



and these reasons are very instructive. But unless we can show that the same reasons existed in Tibet, we cannot escape from the conclusion that this large number of coincidences proves an actual historical communication between Roman Catholic and Buddhist priests.

And such a channel through which these old Roman Catholic customs could have reached Tibet, can be shown to have existed. It is an historical fact that Christian missionaries, chiefly Nestorians, were very active in China from the middle of the seventh to the end of the eighth century. Their presence and activity in China during those centuries are attested not only by the famous monument of Hsian-fu, but likewise by various Chinese historians, and we have no reason to doubt their testimony. The Nestorian Christians had monasteries and schools in different towns of China, and were patronized by the government. We know that one of the monks in the monastery at Hsian-fu was at work under the same roof with a well-known Buddhist monk from Cabul, trying to translate a Buddhist Sanskrit text into Chinese. The prosperity of the Nestorian missions in China lasted till the year 841, when the Emperor Wû-tung issued his edicts for the suppression of all Buddhist, and likewise of all Christian, monasteries. While Buddhism recovered after a time, Christianity seems to have been rooted out; and when Marco Polo visited Hsian-fu, he tells us that 'the people were all idolaters.'

But although in later times the number of Christians in China remained insignificant, there was ample time from the arrival of Olopun, the first Nestorian missionary, to the edict of the Emperor Wû-tung,

that is from 635 to 841, for Christian doctrines and Nestorian ritual to spread in China, and if in China, then in Tibet; for in religion, particularly in Buddhism, the two countries were one. We know that Buddhist priests collaborated with Christian monks in the monastery of Hsian-fu; nay, we actually possess a warning issued by the Emperor Tetsung against mixing up Buddhism and Christianity, a warning that would be opportune even at the present moment. When we know all this, the coincidences between the Buddhist ceremonial of Tibet and the Roman Catholic services at Rome, startling as they seemed at first, need no longer surprise us, and can certainly be accounted for without appealing to the devil. Some of the coincidences pointed out by Huc and Gabet, such as fastings, processions, spiritual retreats and even rosaries, can really be accounted for by a simple appeal to human nature, and can be matched among races who never had any contact whatever with Christian missionaries. Even other coincidences, such as the mitre and crosier, if they stood alone, might possibly be explained or accepted as purely accidental. It is the number of them, all belonging to one and the same class, *mitre*, *crosier*, *dalmatic*, *cope*, *five-chained censer*, *holy water*, &c., which makes such an explanation impossible. May I remind those who maintain that identity of names is of small value in a comparative study of Aryan customs and myths, of what immense value it would be for us if one single Italian name, such as *mitre* or *dalmatic*, could be discovered in the language of Tibet. If this were so, would not all opposition collapse at once, and all doubt vanish; whereas at present some people still

shrug their shoulders and prefer with Voltaire to doubt, instead of with Gibbon accepting the genuineness of the monument of Hsian-fu, and the intercourse between Nestorian and Buddhist priests during the seventh century within the walls of the monastery of Hsian-fu.

And this leads us on to the consideration of another class of coincidences between Buddhism and Christianity. Such coincidences have been pointed out again and again, unfortunately not in a purely historical spirit, but in the impassioned tone of theological controversy. If religion is the natural outcome of the human mind, when brought face to face with that truly divine revelation which speaks to us with irresistible force from every part of nature, it would be strange, indeed, if we did not find certain coincidences between almost all the sacred books of the world. They exist, and they ought to exist and be welcome to every believer in the dignity and destinies of the whole human race. We lose nothing by this recognition; nor does any truth lose its value because it is held, not only by ourselves, but by millions of human beings whom we formerly called unbelievers.

We know that the ordinary commandments not to kill, not to steal, not to lie, not to commit adultery, nay, even the highest commandment of all, to love our neighbours as ourselves, and the warning not to do unto others what we do not wish others to do unto us, are shared by nearly all the great religions of the world. There can be no question here of borrowing as in the case of ecclesiastical vestments. The mere date of the Buddhist Canon would be a sufficient

answer to such a supposition. Even such minor matters as confessions, fastings, celibacy of the clergy, and rosaries, form part of that ancient Buddhism which we know from the Tripitaka, the Bible of the Buddhists. It is admitted by most scholars that the Buddhist Canon was collected at the council of Pataliputra (Patna) held in 259 B.C., when Asoka, the grandson of Sandrokyptos, was the supreme ruler of India<sup>1</sup>. No one can seriously doubt the date and the historical character of Asoka, whose very inscriptions we possess engraved on rocks and monuments. But to avoid all controversy we may be satisfied with the date of Vattagamani, 88-76 B.C., during whose reign we know that the Buddhist Canon was reduced to writing. As yet, his date has never been doubted, nor the fact that during his reign the Canon was reduced to writing. Of course, the date of Sandrokyptos, the grandfather of Asoka, depends altogether on the date of Alexander the Great, and people who have doubted the existence of Napoleon may question the historical character of Alexander and his expedition to India. In this case the date of Vattagamani would fall, and the Buddhist Canon might be called a forgery of wily Buddhist priests. Scholars, it is said, have been mistaken before, and may be mistaken again. In this way we might no doubt get rid of all ancient history, including the whole of the Old Testament. But this is not the method followed by critical scholars. If they are sceptical, they are so in order to arrive at truth, not in order to say, What is truth! As scholars, we have to distinguish carefully between the two Canons of Buddhism, the one com-

<sup>1</sup> *Sacred Books of the East*, x. p. 39.

posed in Pāli, and written down, as far as we know, in the first century before our era; the second, composed in Sanskrit and written down in the first century after our era. The former is called the Hinayāna-Canon, the latter the Mahāyāna-Canon. No one has ever claimed for the Mahāyāna-Canon an earlier date than that of the fourth council, held in the first century after Christ in the monastery of Jālandhara in Kashmir under King Kanishka<sup>1</sup>. At that time the Sanskrit Canon was not only written down, but was actually engraved on copper plates, and these plates, we are told, were buried under a stūpa by order of the king. It is true these copper plates have not been discovered yet, but it would require an extraordinary degree of historical agnosticism to doubt the dates of the Kings Asoka and Kanishka. We possess the coins of Kanishka, and ever so many inscriptions of Asoka. No doubt the evidence for any event or date before the beginning of our era can be constructive only. Scholars do the best they can with the evidence that is accessible, but they cannot create new evidence. All they can do is never to allow themselves to be swayed by extraneous considerations. They certainly did not fix the dates of the two Canons of the Buddhists in order to establish their priority in comparison with the Christian Canon. Such considerations have no existence for them. They would look upon them as childish, if not as dishonest. Nor were the results at which they arrived by patient labour ever questioned or ridiculed till, in comparing Christian with Buddhist theories, it was found out that the Buddhist version

<sup>1</sup> *Histoire de la vie de Hiouan-thsang*, p. 96.

could claim chronological priority. If the celibacy of the clergy, if confessions, fastings, nay, even rosaries, were all enjoined in the Hīnayāna-Canon, it followed, of course, that they could not have been borrowed from Christian missionaries. On the contrary, if they were borrowed at all, the conclusion would rather be that they were taken over by Christianity from Buddhism.

I have always held that the possibility of such borrowing cannot be denied, though at the same time I have strongly insisted on the fact that the historical reality of such borrowing has never been established. When I said that a borrowing between Christians and Buddhists, and in a still wider sense between West and East, was possible, what I meant was that the road between India and Greece was really open ever since Alexander had found or made a road for his army to march from Greece to India. Buddhism, as we know, was in its very nature a missionary religion, and we hear of missionaries being sent from India to every part of the world at the end of the Council of Pāṭaliputra in the third century B.C. In the second century B.C. Buddhist missionaries were, as Darmesteter has shown, hard at work in western Persia. These missionaries would be called in Pāli *Samanas*<sup>1</sup>, and, therefore, if we hear of *Samanaioi* in Bactria in the first century B.C., we know for certain that Buddhist missionaries must have been there at least before the beginning of the Christian era, teaching philosophy and religion to the Greeks settled in Bactria on the frontiers of India. Our authority for this is Alexander Polyhistor (first

<sup>1</sup> *Chips from a German Workshop*, i. p. 75.



century B.C.), as quoted by Cyrillus (fourth century A.D.). In the second century A.D. Clement of Alexandria knew of the same *Samanaioi*; nay, he quotes the name of *Boutta*, who, he says, was worshipped in India like a god; while Eusebius, in the fourth century, is acquainted with the name of Brâhmans also. There is not one of these authorities that might not be cavilled at; but in that case we had better give up all history, and declare with Walpole that all facts are fiction. History, no doubt, is made up of fragments; yet these fragments can be formed into a mosaic picture, which we call the history of the world, and from which we learn that Alexander marched to India, that he founded Alexandria in Egypt, and that this Alexandria, both before and after the Christian era, became the centre of attraction for Eastern and Western thought, so that an intellectual exchange between Asia and Europe was perfectly possible at that time.

We must not forget that even China, in the far East, was not altogether precluded from intercourse with the Western world; for we learn from Chinese historians that the Chinese advanced in the first century A.D. as far as the Caspian Sea, and threatened to cross it in order to attack the *Tâ-tsin*, that is, the Romans<sup>1</sup>. This was about the same time when the *Yuetshi*, or, as they are called, the *Indo-Scythians*, conquered Bactria, the north of India, and finally occupied the whole valley of the Ganges<sup>2</sup>.

But, I say once more, there is a difference, and a very great difference, between what is possible in

<sup>1</sup> Kœppen, *Religion des Buddha*, ii. p. 4.

<sup>2</sup> Kœppen, *loc. cit.*, ii. p. 12.

history and what is real. If Buddhist missionaries had been at Alexandria, should we not have heard more of them? And if they actually enriched the philosophical or the moral literature of Greek students in Egypt, could they have vanished from the scene of their labours without leaving a trace behind; not a single name of any one of them? The roads were open as they are now between India and Europe; but why do we not hear of a single Ram Mohun Roy on a visit to Alexandria, Athens, or Rome?

It is well known that Indian, nay Buddhist, influence has been suspected in some of the oldest Greek fables, and in parts of the Old and New Testaments. If we take the Greek fables first, what shall we say when we find in Plato allusions to the well-known fable of the Donkey in the Lion's Skin, just as we find it in the Jâtaka, a part of the Buddhist Canon, and put there into the mouth of Buddha himself?

You know the fable as told in Greek. I shall read it to you as told in Pâli in the Jâtaka:—

‘Once upon a time, when Brahmadata was reigning in Benares, the Bodhisatta was born in a farmer's family, and when he grew up he got a livelihood by tillage.

‘At the same time there was a merchant who used to go about hawking goods, which a donkey carried for him. Wherever he went he used to take his bundle off the ass, and throw a lion's skin over him, and then turn him loose in the rice and barley fields. When the watchmen saw this creature, they imagined him to be a lion, and so durst not come near him.

‘One day this hawker stopped at a certain village, and while he was getting his own breakfast cooked,



he turned the ass loose in a barley field with the lion's skin on. The watchmen thought it was a lion, and durst not come near, but fled home and gave the alarm. All the villagers armed themselves and hurried to the field, shouting and blowing on conches and beating drums. The ass was frightened out of his wits, and gave a hee-haw! Then the Bodhisatta, seeing that it was a donkey, repeated the first stanza:—

“Nor lion nor tiger I see,  
Not even a leopard is he:  
But a donkey—the wretched old hack!  
With a lion's skin over his back!”

‘As soon as the villagers learnt that it was only an ass, they cudgelled him till they broke his bones, and then went off with the lion's skin. When the merchant appeared and found that his ass had come to grief, he repeated the second stanza:—

“The donkey, if he had been wise,  
Might long the green barley have eaten;  
A lion's skin was his disguise:—  
But he gave a hee-haw, and got beaten!”

‘As he was in the act of uttering these words the ass expired. The merchant left him and went his way.’

Such coincidences are different from the well-known coincidences in language and mythology with which comparative philologists and comparative mythologists have to deal.

When we find the ten numerals exactly the same in all the Aryan languages, the very idea that the Greeks borrowed their *τρεῖς*, three, from the Sk. *trayas*, would never enter into our mind, still less that the

Hindus borrowed from the Greeks. We are moving here in a totally different stratum of history, and the same applies to mythological names, such as *Dyaus* and *Zeus*, *Sûrya* and *Helios*, *Ushas* and *Eos*; nay, even to such mythological stories as were invented to explain the relationship of the Aryan gods, and the marriages which spring naturally from the visible relations between the sky, the sun, the dawn, the moon, and all the rest. The sky father would have to be represented as the father of somebody, the father of the daily sun, for instance, or of the dawn, or of rain and lightning. Again, in his solar character, he might be represented not only as the father of the dawn, but also as the follower or lover of the dawn, as young and beautiful every morning, as old and dying every evening. Here are the germs of many a myth and many a tragedy. Such stories form the staple of ancient mythology in every branch of the Aryan family. Yet no one could say that the Greeks borrowed their *Zeus* and the stories connected with him from the Hindus, or the German tribes their *Tiu* from the Greek *Zeus*. We have this *Tiu* still in our *Tuesday*. We might as well say that they had borrowed their *numerals* or the terminations of declension and conjugation. Like the numerals, the names of some of the ancient Aryan gods and heroes also must have had their origin long before the Aryans separated, before the Greeks were Greeks or the Germans Germans. But though the simplest elements of Aryan mythology were, no doubt, common property, the later phases were of national growth. When we are told, for instance, that Argos had eyes over the whole of his body, and that he was made to watch Io when

changed into a cow, we may recognize in Argos a male representative of the starry night, and in Io a representative of the moon. This may be a very old myth; but when we are told that after Argos had been killed by Hermes, Hera placed his eyes on the tail of the peacock, and that the peacock was the sacred bird of Hera, we know that this must be a modern myth, because peacocks were not known in Greece before the fifth century B.C.<sup>1</sup>

Comparative mythology has to distinguish carefully between the different strata of gods and heroes, between what constitutes ancient common Aryan property, and what is the peculiar property of each nation. And for that purpose nothing is so important as the names of gods and heroes. Whenever the names are the same in Sanskrit and Greek, we know that they existed before the Aryan Separation, and whenever they can be explained etymologically, they give us, as Mannhardt has well remarked (*Mythol. Forsch.*, p. 81), the key to the fundamental meaning of every myth or custom.

But after it had once been proved that some fragments had been preserved out of the general deluge which we call the Aryan Separation, that not only all numerals, pronouns, prepositions, but names and legends of gods and heroes also had been saved of the common Aryan heritage, and carried north and south by the descendants of those who were once united in language, religion, myth, and customs in their common Aryan home wherever we may choose to place it, another bold step was made by Jacob Grimm. He

<sup>1</sup> Hehn, *Kulturpflanzen*, p. 306; Movers, *Phön. Alterth.*, iii. p. 93; earlier in Lybia and Samos.

thought he could prove that certain fables also, particularly animal fables which we find in India, Greece, and Germany, had been carried by mothers and grandmothers on their migrations from Asia to Europe, had been repeated by their children and grandchildren, differing no doubt in local colouring, but always the same in substance and purpose. It requires boldness to differ in such matters from so great an authority as Jacob Grimm, and all I can bring myself to say is that he seems to me to have gone rather too far. I believe he was right in holding that the germs of certain stories existed before the Aryan Separation, possibly in the form of proverbs, and that from them sprang in later times some of the fables which he considered as common Aryan property. For instance, it may have been an old Aryan proverb to say *Vestigia nulla retrorsum* ('no footmarks point back'); huntsmen and shepherds, looking for game or strayed cattle, would naturally use such an expression, and would hand it down as a useful rule to their children. And if at a later time it required illustration, how easily might such fables have been invented as that of the fox who would not enter the lion's den, because he could see from the footmarks that many animals had indeed entered in, but none had come out. Another shepherd's trick may have been to drag stolen cattle backwards into a cave. Those who looked for their stolen cows would be deceived, as Apollo was by Hermes, as Hercules by Cacus<sup>1</sup>, by seeing from the marks that the cows had marched out, and could no longer be found inside the cave.

All this we may admit as possible; but that these

<sup>1</sup> Bréal, *Mélanges*, p. 45.

proverbs had assumed a fixed literary form at so early a time, is more than would be conceded even by scholars, who hesitate before they forsake such a leader as Jacob Grimm.

What then remains, I ask, but to admit at a time long subsequent to the Aryan Separation, a really historical intercourse between East and West, on such roads as we have pointed out? Story-tellers represented by the name of *Aesopus*, might easily have travelled from the Indian frontiers of Persia to Lydia; and if Solon could have lived at the court of *Croesus* and communicated to him the proverb which is still alive, *Nemo ante mortem beatus*; nay, if *Croesus*, many of whose subjects were Ionian Greeks, could have consulted the Delphic oracle and received the ambiguous answer which led to his defeat by Cyrus (542 B.C.), surely there could have been no unsurmountable barrier between the story-tellers, male or female, of those countries. Again, if Darius invaded Greece, and lost the battle of Marathon, some Persian prisoners, educated and uneducated, must surely have been left behind in Greece. We know even of Greek *émigrés* such as Alcibiades, who lived in Persia and became almost oriental in manners and thought. If with all these openings there had been no exchange whatever between East and West in their literary productions, it would have been strange, to say no more; and though, as I repeat, we have no tangible evidence of anything like translations, whether oriental or occidental, at that time, we seem perfectly within our right when we look upon the numerous coincidences between the fables of *Aesopus* and the fables occurring in Sanskrit and Pāli literature as

proving the fact that there was a real literary exchange between India, Persia, Asia Minor, and Greece, beginning with the sixth century B.C.

We may be ready to accept the names and the stories of the Aryan gods and heroes, the stories of Kronos, of Endymion and Selene, of Daphne and Apollon, as survivals of a period during which the Aryan language was not yet definitely broken up; but that a story, such as that of the Donkey in the Lion's Skin alluded to by Plato, should have existed at that early time, and have been handed down in the same way as common Aryan property, is more than I can bring myself to believe. A fable forms a well-articulated whole; it is almost a work of art, with a beginning, a middle, and an end; it has a point and an intention, and such an intention can hardly have been carried out twice in the same manner by poets independent of each other. It is quite true that this is a question to be decided by taste and judgement rather than by mere scholarship; but there seems no danger that, on this point, literary critics will differ from the judgement of scholars.

More difficult is the question whether these fables were all borrowed from the East, or whether some of them may have been carried from Greece to Persia and India.

What we must here consider is, that the Greeks never claimed fable literature as their own creation, though they have made many of these fables their own by clothing them in a thoroughly Greek garb. There are even some very significant traces in Greek fables of their Eastern origin, such as when the birds choose the *peacock* as their king, and when the lion is



introduced as the king of all animals. Even the elephant is mentioned in some of Aesop's fables (Hahn, *Fabulae Aesopicae*, 261), and serpents act a very prominent part. These are all pre-eminently, though not exclusively, eastern animals. On the other hand, animals like the fox and the bear, who are leading characters in German fables, never appear in India. Another argument in favour of the Eastern origin of Greek fables is the abundance of fables in India, and their early appearance in Sanskrit literature, as, for instance, that of the stomach and the limbs, told in one of the Vedic Upanishads, and again at Rome by Menenius Agrippa.

In India, these fables have been collected again and again; they are constantly appealed to, and they permeate the whole body of Indian literature. They form an integral part of Buddhist teaching; they were actually incorporated in the sacred Canon of the Buddhists, and written down before the beginning of the Christian era. In a collection called the *Jâtaka*, or the birth-stories of Buddha, we have every kind of fable, put forward by Buddha with the object of showing that he himself, in a former existence, always acted the part of the good and wise character in these fables, whether a man or an animal. Sometimes, the part which he is supposed to have acted in his former existences would not seem to us quite worthy of Buddha; but that only serves to show that these fables were not invented by the Buddhists on purpose, but that they existed before the rise of Buddhism, that they were popular and therefore utilized by Buddha and his disciples for their own purposes. It might seem strange that these popular stories

should form a large division of a sacred canon. Their real object, however, has lately become evident by another book, the *Jātakamālā*, not an integral portion of the Buddhist Canon, but a work from which we clearly see that these fables were not used simply in their dry and matter-of-fact form for the amusement of the people, but that they served as texts for homilies to inculcate the moral lessons of Buddhism<sup>1</sup>. I was formerly more doubtful as to the Eastern origin of the fables of Aesopus and Phaedrus; but following up the subject with a perfectly unprejudiced mind, I have become more and more inclined to admit that India was the soil that produced them originally, and that the principal characters in these fables, and the whole surroundings, are Eastern rather than Western. We know very little about the origin of fables in Greece. The only thing we are told is, that a stranger, Aesopus by name, was held responsible for most of them. His name was known to Herodotus, but not as that of a Greek author. He was supposed to have been of Phrygian origin, and a friend of Croesus, the king of Lydia. All this points to the East, nay, the very name of *Aesopus* has been explained by Professor Welcker as meaning *swarthy*. From India, by way of Persia and Lydia, a burnt-faced *Aesopus* may well have carried these fables to Alexandria, or to some equally accessible mart that was open to the Greeks of Ionia and Athens. Here at Alexandria *Babrius*, who composed the oldest Greek version we possess of Aesopian fables, may have laid in his stores; while *Phaedrus*, the slave of Augustus, rendered

<sup>1</sup> *Jātakamālā*, in the *Sacred Books of the Buddhists*, i. p. 13.



them popular afterwards over the whole civilized world.

Thus and thus only, it now seems to me, can we explain Plato's reference to the donkey in the lion's or the tiger's skin being betrayed by his braying, and the occurrence of other fables in Greece previous to Alexander's discovery of India. It is possible, nay, it seems likely, that many of these fables sprang originally from mere proverbs, or short sayings, and that their illustration was left more or less open to each story-teller. Suppose there were such sayings as 'Preserve me from my friends,' we could then easily understand both the similarities and dissimilarities between the full fables such as we find them in India, Greece, and afterwards all over the world. In the *Pañchatantra*, the oldest collection of fables in Sanskrit which we possess, this saying is illustrated in the following way:—

'A king asked his pet monkey to watch over him while he was asleep. A bee settled on the king's head, and as the monkey could not chase it away, he took his sword, killed the bee on the king's head, but at the same time fractured the royal skull.'

Buddha, in the *Jātaka*, No. 44, tells the story of 'a bald grey-headed carpenter whose head glistening like a copper-bowl, was attacked by a mosquito as he was engaged in planing, and who told his son to drive away the mosquito. "All right, father," answered the son, took his axe to kill the insect, but in killing it cleft his father's head in twain. Then the future Buddha thought, "Better than such a friend is an enemy with sense, whom fear of men's vengeance

will deter from killing a man"; and he recited these lines:—

"Sense-lacking friends are worse than foes with sense,  
Witness the son who thought the gnat to slay,  
But cleft, poor fool, his father's skull in twain."

The same story is, of course, well known from Phaedrus; in fact, there is hardly a country in Europe where we do not find a more or less happy variation of it. The late Sir George Dasent quotes the following from a collection of Norwegian tales:—

'A man saw a goody hard at work banging her husband across the head with a mallet, and over his head she had drawn a shirt without any slit for the neck.

"Why, Goody," he asked, "will you beat your husband to death?"

"No," she said, "I only must have a hole in this shirt for his neck to come through."

This differs no doubt considerably from the Buddhistic version; still I cannot help thinking that the first impulse for all these stories came from India.

To mention one more fable: Buddha, in the *Jātaka*, No. 38, tells the story of the crane who promised to carry the fishes to a pool full of water, but ate them all on the way. At last he carries a crab, but the crab, when he sees what has happened to the fishes, grips the crane's neck and kills him. Here again Buddha finishes with a verse:—

'Guile profits not your very guileful folk,  
Mark what the guileful crane got from the crab.'

I think you will admit that such coincidences as we have just pointed out cannot be the result of our

common human nature, still less of mere accident. If we had no indications whatever of an intellectual commerce between India, Persia, Egypt, Syria, and Greece, these coincidences seem to me so startling that they would by themselves be strong enough to establish it. As we have clear evidence that the roads for intellectual export and import were open, we cannot hesitate, I think, to look upon these fables as imported from the East.

We must remember also that at a later time and at the court of *Khosru Nushirvan*, the famous king of Persia, a contemporary of Justinian, the king's physician, *Barzôî* or *Barzûyeh*, was actually sent to India to discover a book full of wisdom, and to translate it into Pehlevi, then the spoken language of the Persian empire. This book was a collection of Indian fables which was afterwards translated into *Syriac*, *Arabic*, *Greek*, *Hebrew*, *Latin*, and all the modern languages of Europe, and is best known by the name of the *Fables of Bidpai*. The migration of these fables was well known, for instance, to John of Capua<sup>1</sup>, to Huet, the Bishop of Avranches<sup>2</sup>, to Sylvestre de Sacy, Loiseleur des Longchamps<sup>3</sup>, and many others; but it was for the first time fully worked out by Professor Benfey in his famous book, *Das Panchatantra*. This is the title of the old collection of Indian fables in Sanskrit, but not in that original form in which it was translated into Pehlevi, but in a later and abridged form. It is clear, therefore, that if we meet with any Indian fables in the various literatures of the world *after* the sixth century, down

<sup>1</sup> *Chips*, iv. p. 545.

<sup>2</sup> *Traité de l'origine des Romans*, 1676.

<sup>3</sup> *Essai sur les Fables indiennes*, 1838.

to the fables of La Fontaine, there is no longer any difficulty. We know whence they came, and how they travelled. Their passports are *en règle* and well *visé*'d on every station which they passed. This is an enormous gain, and has put an end once for all to a great deal of useless controversy. Even if there should be any doubt as to the Eastern origin of the fables of Babrius and Phaedrus, there can be none about the Sanskrit origin of the fables of Bidpai in their various national disguises, even in the charming French costume in which they are presented to us by La Fontaine<sup>1</sup>. But after we have cleared the way so far, there still remain troubles and difficulties.

There are stories in the Old and New Testaments also which have been traced in the Buddhist *Jātaka*. How is that to be explained? No one can look at Buddhism without finding something that reminds him of Christianity; and then the question arises at once, how coincidences between the two religions are to be accounted for. I do not speak of anything that could be called essential to religion, but to certain parts of the framework in which the history of Christianity and of Buddhism is represented to us. I shall not allude to-day to the legend of Barlaam and Josaphat. This matter has, I think, been disposed of, and nothing of great importance, except the very curious Armenian and Georgian versions, has, so far as I know, been added to the evidence which I put together in 1870<sup>2</sup>. After all has been said, the fact remains that the legend of Prince Josaphat, as told

<sup>1</sup> *Chips from a German Workshop* (new ed.), iv. pp. 412-89, 'On the Migration of Fables.'

<sup>2</sup> *Ibid.*, iv. pp. 445-58.



by John of Damascus, or some other writer of the seventh or eighth century A.D., was taken from the life of Buddha as told in the *Lalita Vistara*, a book belonging to the Mahâyâna-Canon. The Greek writer himself, whoever he may have been, admits that the story was told him by worthy and truthful men from India. Hence it cannot and should not be denied that under the disguise of St. Josaphat, Buddha has really, though unintentionally, been raised to the rank of a saint in the Roman Catholic Church. It is a pity, no doubt, that his bones should ever have been shown in a Christian church, for we know that Buddha's bones were burnt, and what remained of them was carefully deposited in sacred shrines in every part of India. But I can see no reason why Buddha, the Bodhisatva, under the name of Josaphat, a mere corruption of Bodhisatva, should not retain his place as a saint by the side of many others, and not always more saintly saints.

Here, therefore, we have found again an historical channel through which Buddhist stories may have passed from East to West. The most famous among these stories incorporated in the life of Josaphat, is no doubt that which suggested to Shakespeare the plot in the *Merchant of Venice*<sup>1</sup>. The story of the three caskets in Shakespeare's play came from India, though not the pound of flesh; but this also may be traced to a Buddhist source, for in one of the *Avadânas*, published by Julien (ii. No. 103, p. 95), we hear of a king who ordered a slanderer to be punished by cutting out one hundred ounces of his flesh; and who, when the slanderer was found to have

<sup>1</sup> *Chips from a German Workshop*, iv. p. 44<sup>8</sup>, n.

been innocent, offered him another hundred ounces of flesh as damages.

We have now to consider the coincidences between Indian and chiefly Buddhist stories, and certain passages in the Old and New Testaments. As I remarked before, these coincidences have little or nothing to do with the essentials of religion, but they may possibly throw some light on the circumstances under which the books of the Old and the New Testaments were collected. They are very different from the similarities with which we began between the Roman Catholic and Buddhist ceremonial; they are equally different from coincidences on points of doctrine and morality on which so much stress has been laid. It seems to me that such coincidences, whenever they do exist, ought always to be most welcome; though it should never be forgotten that on the most essential point of all religion, our conception of God, no two religions can be more diametrically opposed to each other than Christianity and Buddhism.

Many of the coincidences which have been pointed out between Christianity and Buddhism, such as Buddha's miraculous birth; the star over the house where he was to be born; the old Asita waiting for his advent, and dying after having prophesied the greatness of Buddha as the ruler of an earthly or of a heavenly kingdom; Buddha's temptation by Māra; the number of his disciples, and his special love for one of them, Ānanda; the many miracles ascribed to him, and his outspoken disapproval of miracle-working—all these can be accounted for without any borrowing on one side or the other, as I have tried to show in my *Gifford Lectures* (1890), ii. p. 390 *seq.*

On these, therefore, I shall not dwell again, but shall be satisfied with laying before you some further evidence, particularly some parables or stories which occur in the Bible and in the Buddhist Canon. As to the exact channel through which these stories could be proved to have passed, I have to say again what I said at Cambridge in 1882, in my lectures on 'India: what can it teach us?' 'that I shall feel extremely grateful if anybody would point out to me the historical channel through which Buddhism influenced Christianity. I have been looking for such a channel all my life, but hitherto I have found none.'

Let us now examine some of these stories in order to make up our mind whether the coincidences between them are so strong as to force us to admit an actual borrowing in historical times, on one side or on the other, or whether we may accept these coincidences as mere coincidences, or purely accidental. The first is the story of the *Judgement of Solomon*<sup>1</sup>. It is well known that this story occurs in the Buddhist Canon as translated into Tibetan (*Kandjur Vinaya*, vol. iii). We read there of a man who had no children of his first wife, but one son of his second wife, and in order to console his first wife, gave her the custody of the child. After the father's death, each of his wives claimed the child as her own, and when they could not agree they went before the wise Visâkhâ to settle the point. Visâkhâ, being a woman, declared that she could not settle the point, but that the two mothers should try who could pull away the child from the other by main force. This was done; but as soon as the child began to cry, one of the women

<sup>1</sup> 1 Kings iii. 16-28.

let go, and Visâkhâ declared at once that she was the real mother, and gave the child to her<sup>1</sup>. I confess that this story has always seemed to me more clever, more true psychologically than the judgement of Solomon, as we read it in 1 Kings iii. 16-28. The idea of testing the feelings of a mother by so barbarous a process as cutting her child in pieces has always seemed to me very unreal, if not cruel and barbarous. However, even that expedient has its antecedents in Tibet, where in the Dsanglun a story occurs of a princess being asked in marriage by six kings, and where, in order to avert a war between them, the proposal is made to cut the princess into six slices, and give one slice to each of the kings.

How the elements of this story could have floated from the Old Testament into the Buddhist Canon or vice versa, I confess I cannot explain. There was commercial intercourse, no doubt, between Solomon and Ophir; and this Ophir, being called the land of peacocks, apes, gold and sandal-wood, was probably India. But to look upon this story of Solomon's judgement as an import dating from the time of the famous Jewish king, would hardly meet with the approval of Hebrew scholars of the present day. One thing only seems certain to me, that such a story was not invented twice, that it must be a loan on one side or the other, and that it is of supreme importance to come to a decision on this point one way or the other.

The next story to which I wish to call attention is of a very different character. It is that of *Samson* and the foxes. We read in Judges xv. 4, that 'Samson caught three hundred foxes, and took firebrands,

<sup>1</sup> Benfey, loc. cit., ii. p. 544.



and turned tail to tail, and put a firebrand in the midst between two tails. And when he had set the brands on fire, he let them go into the standing corn of the Philistines, and burnt up both the shocks, and also the standing corn, with the vineyards and olives.'

There is nothing corresponding to this in India; but it seems to me an equally surprising coincidence that in ancient Rome<sup>1</sup> it was the custom on April 19, the day of the Cerealia, to let foxes run about in the circus with torches tied to their tails, and that in Corseoli a fox was wrapped in burning straw and grass as a symbol of the fox-demon running in flames through the ripening cornfields. In Italy this custom has been referred to the ravages of the mildew, the *rôbigo*, which were to be averted by a god and goddess, called *Robigus* and *Robigo*. The German name *Rothfuchs* points in the same direction. But if this was an old Aryan custom, how can we account for its presence among a Semitic nation, unless we accept *Samson* as a humanized sun-god, and the ravages of the cornfields by the foxes as symbolical of the ravages of the hot sun burning the dew and thus destroying the harvest? I can only appeal to Old Testament scholars to solve this problem in one way or the other. All that I maintain is that such coincidences cannot be ignored any longer, and that in cases like this anything is better than uncertainty.

The same applies to coincidences between New Testament and Buddhist stories. We must come to some decision as to their causes, unless we can bring

<sup>1</sup> Preller, *Röm. Mythologie*, 436. Mannhardt, *Mythologische Forsch.*, p. 437.

ourselves to deny the existence of any similarity between them.

Of course, we must take care not to exaggerate the likeness; and translators in particular should be very careful in resisting the temptation of using New Testament phrases instead of a strictly literal rendering. There is, for instance, the *Jātaka* story of a king who discovers that his wife has been unfaithful to him, but who is persuaded by Buddha to forgive both her and her lover. In the excellent translation of the *Jātaka*, by M. Rouse, edited by Professor Cowell of Cambridge, we read (ii. p. 88): 'And the king abode by his advice, and he forgave them both, bidding them *go, and sin no more*.' This, of course, reminds us at once of the words in St. John (viii. 11), 'Go, and sin no more.' But in the text there is nothing corresponding to *Go*, the literal translation would be, 'Commit not again such an evil deed'<sup>1</sup>.

This may seem to be a very small matter, but it is just these very minute coincidences that carry conviction. There is, no doubt, a startling similarity between the teaching of Christ and of Buddha on this subject; but there is a very strong difference also, as, for instance, in the reason assigned by each for the king's forgiveness.

Another parable which has several times been pointed out on account of its similarity with the Gospel is the parable of the *Prodigal Son*. It is found in the *Saddharma-pundarikā*, a canonical book of the Mahāyāna school, translated by Burnouf, and by Professor Kern in the *Sacred Books of the East*, vol. xxi. But I must say at once that in this case

<sup>1</sup> 'Puna evarūpam pāpakammam mā karitthā.'

also I cannot see so great a likeness between it and the parable in the Gospel of St. Luke as many people imagine. We read in the fourth chapter—

‘A certain man went away from his father, and wandering from place to place he became poorer and poorer. The father, on the contrary, who also left his native place, grew richer and richer, and became a great man. One day the son, roaming about from place to place as a beggar, starved and ragged, passed the palace in which his father was living. His father was sitting at the door, and at once recognized his son for whom he had been longing for years, but the son did not recognize his father. On the contrary, he felt frightened at all the splendour he saw, and ran off. Then the father sent servants to fetch back his son, and without telling anybody that the beggar was his son, he gave him the meanest employment on his estate. And when he saw him clearing away the dirt in the house, the father disguised himself as a beggar so as to have some friendly talk with his son. When he found out that the poor beggar had become a good and honest man he told him that he would treat him *like* a son, but still he allowed him to go on with his menial work. At last, when the rich man felt that his end was near, he made over all his wealth to the beggar, but even then he did not tell him yet that he was his son. Only at the very end of his life, and when actually dying, he told him in the presence of all his friends that he was his son, his only son, for whom he had been longing all his life, and who now, after he had come back to him, might inherit all that was his.’

Then follows the application. The disciples of

Buddha have always been his sons, though ignorant of their sonship, and estranged from him while occupied with lower thoughts, till at last Buddha declared them to be his sons and heirs, and charged them to become teachers of the law.

There is no doubt similarity on some points, nay, even startling similarity between the Buddhist and the Christian parables, but the application in our case is decidedly different; it is practical in the Gospel, it is philosophical in the Tripitaka. It is right, no doubt, to note all these similarities; but it is equally right not to overlook the dissimilarities before we make up our mind as to whether any borrowing must have taken place, and, if so, from what quarter it came.

The next case is to my mind much more startling, and the coincidence such that I doubt whether impartial judges could bring themselves to ascribe it to mere accident. It is the story of a pious layman who walks on the water while he is full of faith in Buddha, but who sinks as soon as his mind is turned away from him. We read in *Jātaka* 190 (ii. p. 77):—

‘One evening, on his way to Jetavana, he, the disciple of Buddha, came to the bank of the river Achiravatī, when the ferrymen had pulled up their boats on the shore in order to attend service. As no boat could be seen at the landing-stage, and our friend’s mind was full of delightful thoughts of the Buddha, he walked into the river. His feet did not sink below the water. He got as far as mid-river, walking as though he were on dry land; but there he noticed the waves. Then his ecstasy subsided,



and his feet began to sink. Again he strung himself up to high tension, and walked on over the water. So he arrived at Jetavana, greeted the Master, and took a seat on one side. The Master entered into conversation with him pleasantly. "I hope, good layman," said he, "you had no mishap on your way." "Oh, sir," he replied, "on my way I was so absorbed in thoughts of the Buddha that I set foot upon the river; but I walked over it as though it had been dry ground!" "Ah, friend layman," said the Master, "you are not the only one who has kept safe by remembering the virtues of the Buddha."

In this case the mere walking on the water would not startle me so much, for among miracles this is not a very uncommon miracle. But walking on the water by faith, and sinking from want of faith, seems a coincidence that can be accounted for by some historical contact and transference only; and in this case we must remember that the date of the Buddhist parable is chronologically anterior to the date of the Gospel of St. Luke.

One more coincidence, and I have done. You all know the parable of Christ feeding the five thousand with five loaves and two fishes, and there remaining over twelve baskets full. Well, in the 78th *Jâtaka*, as pointed out to me by Professor Estlin Carpenter, we read of Buddha receiving one cake in his alms-bowl, and after he had fed his five hundred brethren as well as his host and hostess, nay, all the people in the monastery, there were still so many cakes over that they had to be thrown into a cave near the gateway.

Here again there is, no doubt, some dissimilarity,

but the similarity is far stronger, and requires some kind of explanation. We should remember that the Greeks also did not tell their ordinary fables exactly as the Hindus did, nor need the *Jātakas* of Buddha be the mere copies of the New Testament parables, or vice versa. Yet we could hardly deny that communication and exchange there must have been. The chapter of accidents may be much larger than we imagine; but when we have to deal with fully elaborated stories, with tales composed for a moral purpose, we can hardly fall back on mere chance.

That these coincidences exist between the Buddhist Canon and the New Testament has long been known to all oriental scholars. All that I plead for is that they should not be allowed, as it were, to lie and litter about, recognized by everybody, yet unexplained in their historical origin, or altogether put aside. It is not enough that these coincidences should be pointed out; they should be traced to their real source. We have to decide once for all whether we can honestly ascribe them to mere accident, or to our common human nature, or whether we must ascribe them to some real historical intercourse between Buddhism and Christianity. If they can be accounted for by our common human nature, let it be done by pointing out analogous cases. If they can be ascribed to mere accident, again I say let us have similar cases from the chapter of accidents.

I have often been blamed for maintaining what I still maintain, namely, that the number of coincidences between Buddhism and Christianity has been very much exaggerated. Many of them can be, and have been, explained as having arisen from natural

and intelligible causes. But I feel all the more strongly that it is our duty to point out that there are some coincidences remaining which cannot be accounted for in that way. We cannot adopt the diabolical explanation proposed by Huc and Gabet. All we can do is to face the facts such as they are, and to try to understand them.

I have tried, therefore, to lay the case before the members of the Royal Society of Literature, not as an advocate who pleads for one side or the other, but rather as a detective or as a solicitor who collects and arranges the evidence, or as a judge who has to sum it up, showing as little prepossession as possible towards one side or the other, and leaving the final verdict to the jury. On one point only I feel strongly; these matters should not be allowed to remain any longer undecided. Some people speak as if Christianity had been borrowed wholesale from Buddhism; others, in pleading for priority on the Christian side, are apt to forget that the Buddhist Canon was reduced to writing in the first century before the Christian era. As little as Buddhism would suffer if some of its Jâtakas could be proved to have been taken from the West, would Christianity suffer if certain of its parables could be proved to have come from the East. Because one of the saints of the Roman Catholic Church was suggested by the story of Buddha, it does not follow that all Christian saints were Buddhists in disguise; nor would the Eastern origin of some of our parables, particularly when employed with a new purpose, affect the value which they have hitherto possessed.

Parables are very apt to assume an historical

character. I am told that the very house of Dives is shown at Jerusalem. And would the parable of a man being saved by faith from 'the waters that drown us and from the storm that goes over our soul' be less instructive than the account of an actual walking on the surface of a lake? In all such cases we often gain more than we lose; anyhow, we can never lose by yielding to truth.

The evidence before you is now complete, as complete, at least, as within the limits of a lecture I could make it; sufficiently complete, I hope, to enable you to form an independent judgement. I have not repeated what I have said elsewhere, nor tried to refute once more the many attempts that have been made to discover coincidences where they do not exist. With regard to the ancient Greek fables, I expect that their Eastern origin will probably be admitted by most people. The migration of fables from India in the sixth century of our era seems likewise beyond the reach of reasonable doubt; and in the case of the Buddha legend as told of St. Josaphat, I doubt whether any objection would have been raised to its Eastern origin but for the very natural feeling that even a reflex of Buddha ought never to have been placed among Roman Catholic saints. Unfortunately, when we come to the question whether the story of the judgement of Solomon was borrowed by Buddhists from the Old Testament, or was carried from India to Jerusalem, it is difficult to keep our own judgement quite unbiassed. We are so accustomed to look upon the judgement delivered by Solomon as an historical event which happened nearly three thousand years



ago, that we find it difficult to believe that this judgement, or the principle of it, may have been known anywhere else; may have been transferred to Solomon as the representative of Jewish wisdom, and like many a proverb, been clothed in that dramatic form in which we find it in the Old Testament. Of course, the two mothers and the babe, as well as the wise king on the throne of judgement, may all have been real beings of flesh and blood, and the judgement may have been delivered once, and once only, at Jerusalem. But then comes the difficulty: how it could have become known in India, and how, instead of being ascribed to Solomon, it could have been told there of Visâkhâ, a mere woman, though a wise woman; and how it could have been altered so as to sound to our ears more natural psychologically than Solomon's somewhat inhuman proposal. There are difficulties whichever way we turn; and yet I doubt whether any one could bring himself to believe that such a judgement was imagined, or, if you like, was actually delivered more than once.

The greatest difficulty of all, however, has been caused by the parallel stories in the Buddhist Canon and in the Gospels. Many of them, I believe, I have proved to be quite unconnected. But in a few, the parallelism is too clear to be denied. In these cases, our natural inclination would be to suppose that the Buddhist stories were borrowed from a Christian source, and not vice versa. But here the conscience of the scholar comes in. Some of these stories are found in the Hinayâna Buddhist Canon, and date, therefore, before the Christian era. Scholars are at full liberty to prove that the date assigned to that

canon is wrong. But if they cannot do that, and if all competent scholars are agreed as to its date, the question may now fairly be submitted to any English jury. Were these stories carried from India to Alexandria and Palestine, or were they not? We want a competent and impartial jury to decide; and that is the reason why I have brought the case before the members of the Royal Society of Literature, as a fit subject for a learned discussion, and for an authoritative judgement. What is wanted is a straightforward English verdict, *Yes* or *No*; not a shilly-shallying verdict of *Not Proven*. To me an honest verdict of *No* will be quite as welcome as an honest verdict of *Yes*. The one seems to me to require quite as much courage as the other. *No* would mean that the evidence is untrustworthy, and that even if it were not, it would not justify a verdict in favour of Buddhism. *Yes* would recognize the value of the evidence, and would admit that the similarities cannot be considered as purely accidental. What is wanted is the power of sifting evidence, and a simple love of truth. To quote the words of Rosmini, one of the most eminent Roman Catholic divines, 'We must be firmly persuaded in seeking for truth that, in itself and in its consequences, it must lead to good.' Whatever value we may attach to our own most cherished convictions, there is something more precious than all of them, and that is a perfect trust in truth, if once we have seen it.

## HOW TO WORK<sup>1</sup>.

HAVING had the honour of being chosen one of the visitors of Manchester College, I have been still further honoured to-day in being invited by your Principal to address a few words to the young students of this College.

As I am an old man, I believe I was supposed to be able to tender some useful advice to those who are just entering on their more serious studies, and to tell them *how* to work, if they want to make their work a real pleasure to themselves, and a real help to others. But let me say at once, that I know from sad experience that there is nothing so difficult as to give advice—I mean good advice, advice that is likely to be followed after it has been given. There is a well-known Sanskrit verse:—

‘Who are blind? Those who do not see the other world.

Who are deaf? Those who do not hear good advice.’

The number of blind people may be large, but that of the deaf people is, I believe, larger still. Take, for instance, the advice given by a father to his son. It stands to reason that a father has seen more of life, and the temptations and troubles of life, than his son. And it may safely be taken for granted that a parent has not only gathered in more experience than his

<sup>1</sup> A lecture delivered to the students of Manchester College, Oxford, in 1896.

children, but that he would give them the very best advice he has to give; for if there is any unselfish love on earth, it is that of parents for their children. And yet how seldom is a father's advice taken; how often is it even resented and rejected! This must be the fault of somebody, either of the father or of the son. The son will generally say that life has changed so much, that what may have been very good advice thirty or forty years ago, is so no longer. 'Nous avons changé tout cela,' is a very favourite phrase among the rising generation, as if there were no eternal laws as unchangeable as the courses of the stars, and as firmly riveted as the chains of mountains. The father, on the other side, is apt to forget that many lessons of life can be learnt by experience only, that no one can learn to swim without wetting himself, without jumping into the water, and, it may be, nearly drowning. Another defect of paternal advice is, that it is so often at the same time a reproof or a command, and therefore misses the effect for which it was intended.

Now what should good advice be, if it is meant to produce a good effect? You know that my chief occupation in life has been the study of words, and whatever I have to write or to say, I find it very difficult not to refer to language and the study of language. That study offers a great variety of attractions, at least to my mind, and I have found that an untold wealth of wisdom lies embedded in the successive layers of language which can be laid open before us by historical and etymological research. Being asked as an old scholar to give some advice to young scholars, I at once asked myself what was

the original meaning of *advice*. You will say, 'Well, everybody knows what advice means. It means good counsel, exhortation, admonition, and all that.' Yes, but that is not what I meant. These are all mere synonyms, more or less accurate. But what we want to know is something quite different; we want to know why the word *advice* means what it means, whether counsel, exhortation, admonition, or anything else. Every word in English is like a nut that can be cracked by means of either historical or etymological crackers. No doubt, when we get at the inside, we sometimes find that the kernel is old, decayed, and musty, and of no use whatever for our own purposes; but at other times, and I should say in the majority of cases, the kernel is sound, and worth extracting and extricating from its surrounding skin. In the case of English words we generally have to begin with our historical crackers, before we can apply etymological solvents. If you consult the New English Dictionary published by our University Press, under the editorship of Dr. Murray, which declares itself on its very back and backbone to be founded 'on historical principles,' you will find, first of all, a long history of the various spellings of *advice*. Nothing is so capricious and unreasonable as the spelling of English words. Our present spelling, which we teach with so much trouble and fear and trembling, was settled chiefly at the time of the introduction of printing, and the compositors, standing before their desks in the printing offices of England, had much more to do with it than the composers of books sitting at their desks in their studies. Thus we find that, in the thirteenth century, *advice* was

spelt without a *d*, *avis* and *avys*; in the fifteenth century we meet with *avyce*, and, in the sixteenth century only, with *advyce*. We should naturally have supposed that *advice* would be the original form, and *avis* a later corruption, but we can easily see what has happened. The correct spelling, namely *avis*, as it was in French, seemed strange to English printers, simply because there were not many words in English that looked like it. Hence *vis* was spelt *vice*, which had more of an English look about it, and the *d* was put in afterwards, we know not whether in pronunciation first or in writing first, by some one who had a smattering of Latin and who thought of such words as *advent*, *adverb*, *adventure*, &c. That is how our English spelling has been settled in many cases.

The next question is, what is the origin of the French *avis*, changed in English to *advice*. Our English Dictionary says that the French *avis* was the Latin *advisum*, from *ad*, to, and *visum*, seen, meaning therefore the way in which a matter is looked at or *our* view of a case. This is partly right and partly wrong. *Avis* stands for *ad visum*, but it is not the participle of *advidere*, because I doubt whether there ever was such a compound as *advidere*, even in mediaeval Latin. We must go behind *advisum* and behind *avis*, as a noun, and we then find first of all such expressions as *il m'est à vis*, literally, 'it is to me at sight,' that is, it is my view or opinion.

After that '*mon à vis*,' my at sight or my view, would become *mon avis*, and be rendered in the Latin of the time by *advisum*. We can watch just the same

process in the French *avenir*, the future. This is not the Latin infinitive *advenire*, for infinitives are not used in that way; and *advenire* would not mean what is to come, but the act of coming or what has come, just as *adventus* in Latin means arrival, but not the future.

*L'avenir*, the future, was really in its origin that which is to come, *ce qui est à venir*. The future, therefore, was called *l'avenir*, that which is to come, and it is quite possible that we owe this and several other French words to the Franks, Lombards, Vandals, and other German tribes settled in France, Lombardy, and Vandalusia, i. e. Andalusia or Spain; who thought in German but spoke in Latin, and who translated the Teutonic word *Zu-kunft*, i. e. what is to come, by *l'à-venir*. Even at present we find in the Low German dialect *tokum* used as an adjective in the sense of future, for instance, *de tokum jahr*, i. e. the future year, the year that is to come, as if we were to say, in English, the to-come year.

You thus see that the kernel which we find after we have used historical and etymological crackers on the word *advice* is curious, but no more. It does not teach us much; not more, in fact, than what we knew before, namely, that *advice* given by a father is often no more than the father's point of view, his view of the case, not necessarily that of the son also.

Another word for *advice*, viz. counsel, is evidently the French *conseil*, the Latin *consilium*; and this discloses in the far distance a more interesting picture of a father advising his son, namely, their sitting together, *consulere*, putting their heads together and arriving in the end at a deliberate, i. e. a well-weighed

opinion, shared by both father and son, which is the advice or counsel more likely to be followed than merely paternal views or admonitions.

But let us look a little further afield. You know how much the science of language owes to Sanskrit; and as the earliest periods in the growth of thought can best be studied in the growth of words, the science of language, if only properly pursued, becomes of necessity the science of thought. Now what was the original concept of advice in Sanskrit? We find, as in English, many words in Sanskrit which can be rendered in English by advice. But the most instructive for our purpose is mantra. The dictionary tells you that mantra means among many other things advice or counsel. But what we want to know is, again, why mantra means advice. It cannot be by accident, still less by agreement that every word has the meaning which it has; and this is one of the most important discoveries which we owe to the science of language, or, what is really, if only properly understood, the same thing, to the science of thought. If we once know what none of the ancient philosophers knew, nay, what few even of modern philosophers have learnt, namely, that language exists neither *θέσει* nor *φύσει*, neither by agreement nor by nature, but *λόγῳ*, that is by conceptual thought, the whole of our subjective philosophy (psychology, logic, and even metaphysics) becomes changed, and we learn to study these subjects, no longer merely in the abstract, but in their concrete and historical form, namely, in the archives of language, both ancient and modern. Take such a word as mantra, which, as I told you, means advice, and we can dissect it easily enough in man



and tra. Now tra is a well-known suffix which is called an instrumental suffix. You know it well in Latin and Greek, for instance, in Latin, *ara-trum* from *arare*, an instrument of ploughing, that is, the plough, or in the Greek *ἀροτρον*, a plough.

In Sanskrit you have much the same word as *aratrum*, viz. *aritrām*; but it does not mean plough, though it means the instrument of ploughing, only not of ploughing the land, but of ploughing the sea; that is, an oar. If you add this instrumental suffix to the root *man*, which means to think, you get *mantra*, advice, but originally anything that makes us think. Here you see one of the many lessons that a study of languages gives us, if only we have ears to listen to its secrets. It shows us what our distant ancestors thought in coining their words. Good advice was conceived by the ancient framers of language in India to be something that ought to make us think, and it certainly seems to be the real nature of good advice that it makes us think for ourselves, reflect, and then act.

Thus a minister of state was called in Sanskrit a *mantrin*, lit. a man who gives advice to a king, or, if possible, makes a king think for himself before he acts. The same word exists in Chinese as *mandarin*. The mere sound of the word tells you that it is a foreign word in Chinese, imported probably by the Buddhists when China was converted to Buddhism about the beginning of the Christian era.

You would hardly suspect the presence of *mantra*, advice, in the Latin *monstrum*. But for all that, *monstrum* was originally the same word as *mantra*, and meant originally an admonition, particularly an omen

as conveying an intimation of the will of the gods, something that should make us think, wonder, and reflect. It was afterwards restricted to bad omens, as conveyed by supernatural or unnatural appearances, and then ended by meaning a monstrosity, anything terrible, anything that ought not to be what it is. A monster of a man is even to us a man that makes us think and shrink at the same time, though the thoughts which he suggests are not always pleasant thoughts. The inserted *s* in *monstrum*, instead of *montrum*, is found also in such Latin words as *lustrum* from *luo*, to clean or to purify, *plaustrum* from *plu*, *πλέω*, to move along, to swim.

But I must not allow myself to be decoyed any further by the siren voice of language. I wish simply to carry away for our own special purpose this one lesson, that the wise men of India thought that *advice*, in order to be *advice*, should be man-tra, should always be something that makes us think. I therefore wish you to look upon what I am going to say as no more than something to think about, as something that may possibly make you think for yourselves.

The first mantra or advice I should like to give you is, 'Whatever may be the work before you, put your whole heart into it.' Half-hearted work is really worse than no work. And if I say put your whole heart into your work, what I mean is, do not look upon the books which you have to read as mere books, as mere things to be got up for an examination, but take a personal interest in them, or rather in their authors. Love them if you can, or despise them if you must, but make them live again; think of

them as your friends, as, to a certain extent, like or unlike some people you have known in your own life; take them as belonging to the same world in which you live, as fellow workers in the same great work for which we and they, nay, the whole human race, were placed on this planet of ours—not surely for amusement or idleness, but for some very serious work, and for some very high purpose. This is what I mean when I say, ‘Put your whole heart, or your whole love, into your work.’ And if you can do that, you will find, I believe, that it does make an enormous difference, not only in the pleasure which you derive from your studies, but also in the vividness of the impressions which they leave behind.

Some of the work which we have to do at school and at the University may seem, no doubt, very tedious, particularly in the beginning; and it seems as if the heart could have very little to do with it. But think! do we not toil cheerfully along the hot and dusty roads of Switzerland, and then climb up a steep mountain till we have hardly any breath left in our lungs, and why? Because we know we shall get a wide and magnificent view from the top of the mountain. Now suppose that instead of having this wide and magnificent view from the summit of Mont Blanc to look forward to, we were told that we should meet there such men as Homer, Plato, St. Paul, or St. Clement of Alexandria; should we mind then the dusty road of Greek grammar, or the steep ascent in mastering the complicated terminology of Greek philosophy? I think not.

I shall not, however, speak to you to-day either of Homer or of Plato. The Homeric poetry is certainly

unique, and worth any amount of climbing, but it is not easy to take, as it were, a personal interest in the poet. Long and heated as the controversy has been, a comparative study of ancient epic poetry in India, Persia, among Teutonic, Celtic, and Slavonic nations, nay even among Finnic and Estonian tribes, can leave no doubt that the Homeric poems were not the work of one individual poet, such as the *Aeneid* was of Virgil, or the *Divina Commedia* of Dante. In Greece, as in the other countries, epic poetry was the work of many poets whose names are forgotten. Much of that ancient poetry has been lost altogether; and if we call what remains of it popular poetry, or the poetry of the people, there is a quite intelligible and justifiable meaning in this, because what remains of that ancient poetry is really what has proved most popular, what has been most approved of by the people, what has been most readily listened to by men, women, and children. Popular, not natural, selection has caused here also the survival of what was fittest; that is, what was most inspiring, most instructive, most beautiful: though it was fortunate, no doubt, if, as in Greece, he who collected what was left of this poetry of the people was himself a poet and a man of true taste; such as we feel that the collector of the two great Homeric poems must certainly have been, when we compare his handiwork with that of Vyâsa, the collector of the large Sanskrit epic, the *Mahâbhârata*, with the nameless collector of the German *Nibelunge*, nay even with *Firdusi*, the famous poet of the Persian *Shâhnâmeh* or the Book of Kings.

But if there is some difficulty in forming a clear idea of the personality of Homer, and in feeling a per-

sonal devotion to him, there is no such difficulty when we deal with the great men of later times. And here it makes, as you will find, the greatest difference, whether you read Plato in the most cold-blooded way, simply as a book to be got up for examination, or whether you approach him with a warm heart as one who deserves to be admired and loved—a fellow thinker, a guide, a prophet, a personal friend. To you who are chiefly students of theology, the friendship or love of Plato may seem to be of lesser value than to the scholar and philosopher by profession; but remember what St. Augustine was bold enough to confess, that his two best friends in life had been Christ and Plato. Remember also that it was, if not Platonism, at least neo-Platonism, that secured to Christianity its triumph at Alexandria, and through it its victorious conquest, during the second and third centuries, of the men of light and leading in the whole civilized world; and you will then easily understand why dogmatic Christianity may, in a certain sense, be called the work of Plato and his school. We cannot conceive the Christianity of Alexandria and of Constantinople without such a man as St. Clement of Alexandria, nor can we understand St. Clement without Plato and Aristotle behind him. Though St. Clement has been deprived of his title of saint by those who certainly were no saints themselves, this true Christian philosopher will always retain the place of honour among the true Fathers of the Christian Church, even as simple Clement of Alexandria.

And what applies to St. Clement applies with even greater force to St. Paul. If you read his letters with

an open heart, if you forget the saint, and duly think of Paul as the poor converted Jew, you will come to know him far better than even if you can construe his peculiar Greek before the severest examiner without a single mistake. You should remember first of all that, like Clement, Paul was a convert, or what his friends would have called a pervert, an *apostate*, nay a *recreant*. Here you can see again how language reflects and perpetuates the thoughts of those who spoke it at various periods of history. A *recreant* meant originally no more than a man who *recredits*, that is, who believes again, a man who has given up his old faith and has tried to replace it by what seems to him a truer and purer faith. But very soon a recreant came to be used in the same sense as a *miscreant*, a wrong believer, an infidel, a vile fellow, or a wretch. Such was Paul in the eyes of the Jews; such, to a certain extent, was Clement also in the eyes of his friends, the philosophers of Alexandria, whom he had left to join the despised, and, at that time, not yet very philosophical sect of the Christians.

Now I need hardly tell you that, in reality, there is no greater heroism among honest men than a change of religion. I say, 'among honest men,' and I mean among men who had no other inducement for a change of religion than loyalty to that voice which speaks in every human heart, and which is, in the fullest sense of the word, the real voice of God Himself. We know that neither in the case of Paul nor in that of Clement of Alexandria was there ever the slightest suspicion of any motive in their change of religion, except love of truth. I have known men who have changed their religion—I think more particularly of one case—and

I can honestly say, I have never seen such a life-long martyrdom as his has been. Such was the agony he had to endure that I really felt as if we had no right to demand such a sacrifice from anybody. I have always felt a deeper and truer reverence for that poor and despised Hindu miscreant than for many a missionary, nay, for many a bishop or archbishop.

Well, think then of Paul and Clement, not as saints but as what the world calls perverts and recreants, and their words will at once assume a new tone and a new meaning, and will go straight to your heart. What does Paul say as to our duty of choosing our own religion? 'Despise not prophesyings,' he says. 'Prove all things, hold fast that which is good'.<sup>1</sup> Here we see the real man, the real Paul; not the St. Paul who, we are told, was startled by a vision on his way to Damascus, and who, after he had been certain days with Ananias and other disciples, *straightway* preached Christ. The real Paul had, no doubt, done himself what he commanded others to do, namely, not to despise the teachings of any prophets before having carefully examined them; and after having carefully examined them, during many a bitter day and dark night, he had at last made up his mind to hold fast or to keep for himself that which was good and true. Here, as in other cases, if you prefer the miraculous account of Paul's conversion, you lose; if you accept his own natural account, you gain.

Now let us think again and try to find out for ourselves what this advice of St. Paul really amounts to when we apply it to the study of religions, and how it defines our duty with regard to an honest study of the

<sup>1</sup> 1 Thess. v. 20.

teachings of other religions. First of all, we are told not to despise religions; that is not so much at any religious meetings because they are different from our own. But it is that secretly what we do! When we see a Hindoo saying his prayers in his own peculiar way at the turning of his necks, we smile. When we see a Buddhist with his turning-wheel we smile. When we see a Brahmin before his idol, we smile. In fact, without knowing anything of other religions, and long before they attempt any serious study of them, most people despise them, ridicule them, and condemn them.

At present it may seem as if a more respectful feeling towards other religions was slowly springing up, at least among educated people. Brahmins, Bonzistas, Zoroastrians, Mohammedans, even Chinese are no longer treated as mere miscreants, and their sacred books are no longer looked upon as mere absurdity or as the work of the devil. But when we come to the religion of so-called savages, the general feeling seems to be that their religion is no religion at all, but mere fetishism, totemism, spiritism, and all the rest. Much as I am interested in the so-called book-religions of the world, it has always seemed to me one of the most valuable results of a comparative study of all religions that behind these mere outworks of the religions of so-called savages, whether we call them fetishism, totemism, or spiritism, there has been discovered almost always the real and indestructible stronghold of all religion, a belief in God as the Father and Ruler of the world.

You know when people talk of savages, they always take the people of Tierra del Fuego or the Patagonians



as the lowest of the low. Darwin<sup>1</sup> has set the example, for he speaks of them as hardly deserving to be called fellow creatures. Their language, he adds, is scarcely to be called articulate. Captain Cook had compared their language to a man clearing his throat; but, according to Darwin, no European ever cleared his throat with so many hoarse, guttural, and clicking sounds. I have shown, on the contrary, that these people possess a dictionary of 32,430 words; and an Italian, Giacomo Bove, describes their language as 'sweet, pleasing, and full of vowels.' How shall we reconcile such conflicting statements? And yet it is on evidence like this that the most far-reaching theories have been built up. But that is not all. We know naturally very little of the religion of these Patagonian savages; but if prayer is a fair index of the worth of a religion, let me read you a Patagonian prayer<sup>2</sup>:—

'O Father, Great Man!  
King of this land!  
Favour us, dear Friend, every day,  
With good food,  
With good water,  
With good sleep!  
Poor am I, poor is this meal:  
Take of it, if thou wilt!'

This is a prayer uttered by people whom Darwin compares to 'devils like those that rush on the stage in the "Freischütz."' To me it seems a prayer in

<sup>1</sup> See *Natural Religion*, p. 82.

<sup>2</sup> See an article by Mr. Leonard in the *Speaker*, July 22, 1893; the prayer is taken from A. Guimard's *Three Years' Slavery among the Patagonians*, p. 163. The translation was made by C. S. Cheltnam. The language (the original is given) is not that spoken by the Patagonians proper, but rather that spoken by wandering tribes in Patagonia.

which we ourselves could join without much shame. It is not addressed to a fetish, or to a totem, or to an ancestral spirit; it is addressed to an unseen Father, to a dear Friend, the King of their land, to whom they offer the best they have, though it is only, as they say, a very poor meal.

It is easy to smile at their offering a poor meal to their God. It is easy for us to ask, 'How could they believe in a God who delights in sacrifices?' But what should we say if the very Patagonians were to turn round and ask us, 'How can you believe that the Son of God sent unclean spirits into a herd of swine, so that about two thousand were choked in the sea?' We know how shocked Huxley was by such a parable, for it can be no more; and would not the Patagonians be even more shocked and more perplexed at the meaning of it?

With regard to the great religions of the world, such as Brâhmanism, Buddhism, Zoroastrianism, Judaism, and Islam, the tactics have generally been to single out some palpable blot in each of them, and then to condemn them altogether. It seemed enough to point out that Mohammed sanctioned polygamy to condemn the whole of Islam; while it was forgotten that nearly all the essential doctrines of the Arabian prophet were the same as those of Moses and Christ, were borrowed, in fact, from the Old and New Testaments. It is well known that polygamy, as practised by Mohammed, was an act of kindness for women who wanted a protector, who could not have lived in their country without belonging to somebody, without being protected by a husband; that it was not, as in the case of David and Solomon, a mere sanctioning of licen-

tiousness. In the same way Brâhmanism is pushed aside, because it sanctions idolatry though the idolatry of the Hindus, at least of the higher and educated classes, is as far removed from the worship of stocks and stones as that of an enlightened Roman Catholic.

With regard to Buddhism, the custom of prayer-wheels is often pointed out as the worst degradation of religion. But I must confess I had little to say when a Japanese Buddhist, to whom I had pointed out the absurdity of such a custom, replied : 'These prayer-wheels are only meant to remind us of Buddha,' and when he added with a smile, 'Is it not better to use a wheel, even when it is moved by the wind or by water, than to employ, as you do in your college chapels, a human being whose chief object it seems to be to get through the service in the shortest time possible?'

Buddha himself begins to be treated with more respect; but it is supposed that he too may easily be disposed of, because forsooth he died of over-eating. But all that the Tripitaka says is that he died *after* eating some food that was given him; and, considering that he was about eighty years of age, he might have died before as well as after that repast. But granting that he died from indigestion, nay, that his last meal consisted of pork, how does that affect the value of his teaching the duty of self-denial and of universal love or rather of universal pity (*kârûnya*) to be shown to our fellow men, nay, to all living creatures? As to St. Paul's command to prove all things and to hold fast that which is good, have Christians ever followed it, at least to the extent to which he carried it out himself, by giving up his old religion altogether and

adopting that religion which he had so fiercely persecuted in his earlier years? It is quite true that his advice does not really amount to recommending a change of religion. We may well study the different religions of the world, and hold fast whatever seems good and true in any one of them. This is very different from surrendering the religion in which we were born and brought up. A man's religion, or rather a child's religion, is never of his own choosing. A man is born with the privilege of being a Christian or a Buddhist, just as he is born with the privilege of being an Englishman or a Hindu. Let us think of the facts. Every religious census is, no doubt, very vague. But if we accept the figures published by the Roman Catholic Missions (Lyons), the total number of Christians at the present time would be about 420 millions. Are there out of that enormous number five or ten who have changed their religion during the past year? The number of Buddhists is given as 423 millions. There may be every year a hundred or even a thousand Buddhists, who, after a careful study of Christianity or Mohammedanism, have forsaken their old faith and adopted one or the other of these religions; but what is that number compared to the compact body of 423 millions? The followers of Brâhmanism are reckoned at 163 millions, and the followers of Islam at 200 millions; and here again one in a million would probably be a large annual allowance for that kind of conversion of which St. Paul speaks.

Such facts should make us think quite as much as St. Paul's advice, and teach us what, taking the world as it is, and taking human nature for what it is, we



may expect from that process of proving all things which St. Paul recommended. And then let us remember what this proving of all things would really mean, if applied to the religions of the world. To prove the principal religions of the world, I mean, to prove and examine them from their own canonical books, is more than any man could do in a lifetime, and any one who were to attempt it would probably render himself unfit for the exercise of any independent judgement.

And this suggests another mantra, another piece of advice as to how we ought to work. There are two views of our work, and it is not easy to decide between them. It is the old question between *multum* or *multa*. I have known men whose knowledge seemed to me perfectly appalling by its bulk, and yet nothing or very little came of it. I have known others whose knowledge lay within very narrow limits, and who yet have done extremely useful work. Now, if you will listen to my advice, I should say that what you young men have to do at the beginning of your studies is not to choose between *multum* or *multa*, between an extensive and general knowledge of many things or a limited but minute knowledge of a few things. You should strive to acquire both *multa* and *multum*—first *multa* then *multum*. A young man, it has been said, should begin his flight like a carrier-pigeon, which goes round and round to survey all that comes within its ken, and then starts in one direction, straight to the one goal that has to be reached. There are, in fact, two kinds of knowledge we have to acquire. Some knowledge we simply put into our pockets, and these pockets cannot be large

enough ; other knowledge we take in and convert into *succum* and *sanguinem*. The latter kind of knowledge is always present, very much like the A, B, C, the multiplication table, the declensions and conjugations of Latin and Greek ; we have not to think about them, they are always there. With regard to the former kind of knowledge, it is enough if we know where to find what we want in one or other of our pockets. Depend upon it, particularly in this age of divided and subdivided study and research, when people devote their whole life to one small period of history, to one class of grasses or lichens, to one author, to one inscription, to one Greek particle, to one philosophy or to one religion, it is more than ever necessary for a young man to gain at his first start as wide a survey as possible of the whole field of human knowledge, of *omne scibile*, in fact, before he descends into his own small mine, never to see the wide blue sky again. After all we owe certain duties to ourselves, besides those which we owe to the world. We are placed here to educate ourselves and to know the world ; and in order to know and understand the world, we must learn to know not only what it is, but also how it came to be what it is. Then again, in every field of knowledge, before we begin to use our own spade, we ought to know what has been done before us, and what corner of the field has hitherto been left almost uncultivated. Otherwise we shall see, what is so often seen at present, that work is undertaken which has been done, and it may be, more thoroughly done by others, whether in our own country or abroad. Nearly the whole of Europe forms now one republic of letters, and not to know what is being done by the

best men in France, Germany, Italy, Denmark, Sweden, and Russia, and the United States of America, is as dangerous as sailing across the Atlantic without knowing the road of the sea.

As young men, you have plenty of time to look about. Simply to have walked through one of the famous picture galleries of Europe is a useful warning against admiration of mere signboards; to have seen, if only *en passant*, the great statues of a great museum, teaches you to distinguish between a mere portrait statue and the Venus of Milo at Paris, or the Diana of Versailles. You need not read Goethe, or Racine, or Dante, as you read Horace or Catullus; but to have breathed their spirit will invigorate your own spirit for life. Learn as many languages as you can as young men. But, unless you have very favourable opportunities, you need not waste your time on learning to speak many languages. If it is said that you become a new man with every new language you learn, that does not apply to a conversational command of many languages such as a courier possesses, but to the appropriation of their best literature, their best thoughts.

And remember, while nothing will prove more useful for life than this early survey of the vast intellectual battle-fields of mankind, before you begin to specialize your work, the time will come when your memory becomes weak and untrustworthy. If what you once knew does not vanish altogether, it does not always come when you call for it, just as when you meet a person; you may know all about him, but you do not know his name—at least, not at the time when you wish to inquire after the health of his wife.

I know no remedy against this; but as the last piece of advice, I should like to show you what I have done myself to guard against the inevitable misfortune of a fading memory. I have, particularly in my younger days, accustomed myself to work on slips. While reading any book I just noted down on small slips of paper whatever seemed to me likely to be of any importance—whether a single word, or a name, or a subject. These slips were thrown into a basket, and, after a time, they were sorted out and arranged alphabetically, and pasted in a book. The difficulty is, of course, to distinguish between what is important and what is not—that is, in fact, the great difficulty which follows us through life, and is almost always the secret of success or failure in scientific and literary work. Another difficulty is to find out the right word (*das Schlagwort*) under which some important information should be entered. I have brought you one of my books. You see it is very old, and to judge from my Sanskrit calligraphy, I should say it must be nearly fifty years old. Yet even now I often get some useful information from these books—nay, I am sometimes amazed to see how much I knew, and alas, how much I have forgotten.

For your own special and original work you want, of course, a different kind of memoranda. You want an index, and these indexes constituted formerly the chief armaments of a scholar's fortress. I still remember the time when—if my memory serves me right—Lobeck, in a controversy with Hermann, replied with great complacency: 'Ah, but I have a better index to Phrynichus than he has!'

If ever you have to publish a text that has not



been published before, what you have to do, if you want to do it well, is to prepare a complete *index verborum*. I have received great credit for my edition of the Rig-veda, and people wondered at the time how it was done. Here is the secret; you see here, in these ten folio volumes, every word as often as it occurs, every *I* and *thou* and *he*, every *and* and *for*, sometimes a hundred or a thousand times. The difficulty of editing the Veda was not so much to edit the text as to edit the native commentary, and I should never have succeeded in this if I had not been able to compare the many passages in which the same word was explained again and again. I must conclude; but I can promise you one thing—if you will follow the advice I have given you, more particularly with regard to working with slips, the time will come, before you are even as old as I am, when you will remember me and my lecture of to-day with a certain amount of gratitude.

## DEAN LIDDELL: AS I KNEW HIM<sup>1</sup>.

GLADSTONE stood certainly not alone when he declared *the worst of nearly all biographies is that they contain hardly anything but praise*. He spoke very highly of Froude's *Carlyle* and Purcell's *Life of Manning*, books which have been violently abused by the friends of the old prophet of Chelsea, as well as by the admirers of the English cardinal, for the very reason that both of them gave in their biographies something more than mere praise. If Gladstone referred to recent biographies, was he not quite right? Do they not leave out all the lines and wrinkles which, as every portrait-painter knows, are essential for imparting life and character to any human face, nay even to Botticelli's faces of angels?

And yet, we should make allowance for biographers, particularly if they are the personal friends or relatives of the man or woman whom they attempt to describe and to immortalize. An untouched photograph cannot be a good likeness. There are deep shadows in it which, as any artist would allow, must be removed. Does not the same apply to biographies?

Let any one who tries to write a biographical notice of a friend, attempt to follow the example of Froude or Purcell, and speak the truth and nothing but the hard truth; and he will feel how his pen

<sup>1</sup> *Fortnightly Review*, January, 1899.

hesitates when he begins to write down anything that might even raise a good-natured smile at the expense of his departed friend, much more when he has to dwell on some dark shades or black spots of which, as we so often confess, in church at least, no life is wholly free. He will feel in fact that the old saying, *De mortuis nil nisi bonum*, 'Say nothing of the dead but what is good,' has its very deep roots in every human heart, and that there is some truth in the old and widely-spread superstition that the spirits of the departed deserve the same reverence as the gods.

But what does the historian say, who cares for truth and nothing but the truth?

It cannot be denied that there are certain biographies which almost sicken those who knew the men there portrayed, whether in their public or their private life. But without defending such frauds on posterity, we should remember how readily we ourselves forget all defects in a departed friend, nay, all the injuries he may have done us, when we are standing by his open grave. In the same way, whether we like it or not, many a fault that seemed reprehensible and unpardonable in a living man, particularly in a man who was engaged in fierce political or theological warfare, seems to become intelligible, excusable, and pardonable as we look at the placid features of the dead. A wider view seems to open before us, in which all proportions change, light and shade vary; so that what seemed to us serious failings at the time, are changed into natural consequences, whether of birth, of health, of rank, of mistaken education, or other unforeseen circumstances. It is for the historian to keep this softening influence of

death in mind. He may condemn angelic caricatures, or decline to accept Disraelis with the wings of an angel, but he must not expect that friends, though they feel bound to say what is true, should without necessity say all that they know to be true.

These remarks may seem to be very uncalled for on the present occasion. I make them really in self-defence, for I must confess that my own feelings of admiration for the late Dean of Christ Church are so strong, and so unmixed, that I have misgivings about my own impartiality, and should not be at all surprised if my remarks were mistaken by others for mere funeral eloquence. Yet I cannot suppress the fact that during my long life at Oxford, extending now over more than fifty years, I have not known one single character, whom, when taken all in all, I could place by the side of Dean Liddell. The University of Oxford, through the mouth of its Public Orator (Dr. Merry), has pronounced exactly the same judgement:—

*'Cui Pudor et Justitiæ soror,  
Incorrupta Fides, nudaque Veritas  
Quando ullum inveniet parem?'*

There was only one other Dean, Dean Stanley, our little Dean, as we used to call him, who, as we measure human perfection, seems to me to come nearest to the great Dean among all the sons of Oxford whom I have had the happiness to know, and to know intimately. Dean Stanley, both in public and in private life, might have seemed very different from Dean Liddell, yet they were made of the same stuff, they both belonged to Nature's true noblemen. When I try to express in one word the character of the two Deans, I should say that they were both perfectly

*straight*; and who does not know what a delight and what a blessing a perfectly straight character is to all who come in contact with him? Only with Stanley that uncompromising straightforwardness was sometimes hidden under very strong sympathies and loving allowances made for others, though not for himself; while with Dean Liddell it stood out boldly and was never to be mistaken. He would never hide his displeasure with what he thought was not quite straight, even in his dearest friends; he might indeed be silent, but then his silence or his shrug of the shoulders was crushing.

I am quite prepared to admit that, in the case of Liddell as well as of Stanley, the independence of their character, and the boldness with which through life they acted up to their convictions, were greatly favoured by the circumstances of their birth. Neither of them ever knew what it was to be poor, and more or less dependent on the good opinions of others. They never had to trim or to tack; they never had to make concessions. It has sometimes been hinted that Stanley was a courtier. But the character of courtiers depends entirely on the character of the court, and in Stanley's case, his court, I believe, would tell a very different tale. Full of charm and love as Stanley was, he was, no doubt, loved and esteemed by all who came near him, whether at court or in a cottage; but if he had been a courtier and a schemer, his career would surely have been very different from what it was. Once when I wished to find out how Stanley behaved at court, whether he dressed or shaved more carefully at Windsor than at Oxford, and particularly whether, when writing to the highest

persons in the realm, he wrote a different hand from that which his friends knew from sad experience, I ventured to ask Prince Leopold. He burst out laughing, and said, 'When a letter from the Dean arrives, we have often to summon the whole castle before we can fully decipher it.' This speaks volumes. The great Dean, stately as he was, wrote always a stately hand, and he, so far from being called a courtier by anybody, was even by those who were most gracious to him, considered a proud man. No higher compliment could have been paid to him. He evidently enjoyed being what he was, and he would not for anything in the world have lowered himself in his own eyes. If a man sees people around him lower themselves, how can he help being proud? If they think him capable of what he knows himself to be incapable of, how can he help being proud? We want such proud men in our days, the *preux chevaliers* of old, and what the *preux chevalier* in former days was meant to be, the Dean was. Proud, therefore, in the best sense of the word, he might well have been called; conceited he never was—nay, in many respects he was the most humble of men. But he could not help appearing proud. Wherever he went he generally towered high above the heads of all in the room. He was truly beautiful as a man, and this, too, should not be forgotten among his natural advantages. The well-known words of Horace fully applied to him:—

'Fortes creantur fortibus et bonis;  
Est in juvenis, est in equis patrum  
Virtus nec imbellem feroces  
Progenerant aquilae columbam.'

And well might the next verse be added in his case :—

‘ Doctrina sed vim promovet insitam,  
 Rectique cultus pectora roborant;  
 Utcunque defecere mores,  
 Dedecorant bene nata culpae.’

The little Dean also, though he did not share the physical advantages of his friend, Dean Liddell, knew very well what he owed to his name, and like a born knight, he never flinched before a mob, not even before a clerical mob. His boldness was sometimes even greater than the Dean’s. Say what you like, even in our democratic days, ‘when we all are alike, nay, a good deal better,’ there is something in the pride of family, and still more in the sense of independence, which a boy acquires from never seeing a sign of want or dependence around him. All this tells on the development of character, it may be for evil as well as for good; but if it tells for good, it gives us men who ride straight in the field, and who vote straight in Parliament. Nothing, no doubt, is more delightful than to see in our days the best schools and colleges open to the poorest of boys—*la carrière ouverte aux talents*; but there is something also in the true sense of *noblesse oblige*, which, small as it is, brightens and sweetens life like fresh air, and which is sometimes sadly missed in our crowded railway stations. However low the meaning of courtier has sunk, we may hope that the English language will never allow the meaning of courteous and courtesy to deteriorate in the same direction.

I did not know Dr. Liddell in his younger days. I had met him when he was Head Master of West-

minster, but I came to know him only after he had been appointed Dean of Christ Church in 1855. He was not a man easy to know; he did not come to you, you had to go to him. At my very first interview with him I even felt a little *froissé* by his reception. Dean Gaisford had put my name on the books of Christ Church, a very great honour; and he did it with so much real kindness that I could never understand why he was called 'the Bear.' When I went to pay my respects to the new Dean, I naturally told him what the late Dean had done for me. 'I found two precedents,' he had said, 'of Germans having been Members of the House; but even if I had not,' he added, 'I should have been glad to make a precedent of your case, and put your name on the books.' I said to the Dean that I hoped he would accept me on the same terms as the late Dean, and he tossed back his head, and said: 'I have no power to do otherwise.' This was, perhaps, not the happiest way of replying, but I soon found out that what seemed to me somewhat brusque in his way of speaking, was really due to his natural bent never to say anything that was not strictly true, and partly to his inability to find at once the right words for expressing what was in his mind. In saying that he had no power to remove my name, he did not mean to say he would if he could, but that he could not if he would, thus disclaiming at the same time all merit for himself.

I confess, however, that I was a little hurt, and it took some time before I made an approach again. The Dean was not what the French call *accueillant*, but he always inspired respect, and that respect was soon changed into trust and affection.



Ordinary or small talk, which is almost inevitable in our society, just as small coins are in trade, never was to the Dean's taste. He seemed even to resent it, and repay it by a kind of contemptuous silence. Soon, however, we found a subject which interested us both, and that was his Greek Dictionary. When I came to use it, I soon found that it was far superior to any Greek Dictionary I had used before, even to that of Passow, on which it was originally founded. There is, of course, an enormous difference between the labour of the first compiler of a dictionary and the labour of those who come after him to amend and to complete his work. I know of one case only where a friend of mine compiled a dictionary of a literary language entirely by himself, and that was the Páli Dictionary, by Childers, still the only dictionary of that language which we possess. Our Greek dictionaries are the result of the labours of centuries, but I doubt whether any body has done so much for rendering the Greek Dictionary perfect, and yet useful, as Dean Liddell. On one point only I had to express an unfavourable opinion. The etymologies were mostly inaccurate, nay, sometimes self-contradictory, the same word being derived from different roots in different parts of the dictionary. The Dean, though not a professed student of Comparative Philology himself, had read enough to know that the whole etymological portion would have either to be left out altogether or to be written again. He asked me to undertake this by no means easy task of revision, and all seemed settled between us, when one day he came to me, shrugged his shoulders, and told me that his proposal had to be given up. He was

evidently displeased, but said he could tell me no more. It is curious, however, how all these things come to the light after so many years. When reading lately a review of my *Auld Lang Syne* in the *Speaker*, written evidently by some one who knew the Dean, and who writes *en connaissance de cause*, I discovered who it was that put a stop to the Dean's plan. He was the very last person I should have suspected, for nothing could exceed his courtesy and seeming kindness to me when I first came to Oxford, and I doubt even now whether he was really to blame.

Such experiences are painful, but I am bound to say that they have been very rare in my life in England, more particularly at Oxford. I do not mean to say that among the thousands of people I have known at Oxford during more than half a century I have never met with a black sheep, but underhand dealing, backbiting, and tale-bearing are not the besetting sins of Oxford undergraduates, nor are even graduates often given to envy, hatred, malice, and all uncharitableness. It is possible that the writer in the *Speaker* may have been mistaken, and I therefore repeat no names. Still less do I mention another and more serious charge, brought against the same person at the time of the contest for the Boden Professorship of Sanskrit. Well may I thank *mes amis les ennemis* at that time, if indeed they could be called *ennemis* at any time. I have learnt, during a long life, to be truly grateful for the mishap that happened then. It gave of necessity a new direction to my studies, and opened a wider sphere of usefulness than Sanskrit literature could ever have given me. How can I ever forget the self-sacrificing kind-

ness of the most distinguished members of the University in carrying on a long and tedious canvass in my favour, men of such different views as the Dean of Christ Church, the Dean of Westminster, the Archbishop of York (Thomson), and Dr. Pusey being prominent among them? I well remember our little Dean coming into my room with tears running down his face, while I, though certainly disappointed, did not at all despair. And what more could the University have done than to take measures that such a politico-theological election should never occur again for the Chair of Sanskrit, and to found a new Chair of Comparative Philology expressly for me?

After I had been appointed Professor of Comparative Philology, I remember once giving a lecture on Greek Lexicography. I knew the Dean would be present, but I also knew he would not mind my speaking my mind on the subject. I had to criticize a number of etymologies of Greek words which seemed to me untenable. However, while speaking of the etymological part of the Dean's Greek Lexicon, I omitted to say anything of, what I took for granted, the excellence of the Lexicon itself. The Dean bore me no grudge, for he knew what I meant. But I was deeply touched when, after the lecture was over, he spoke to me in the most open and friendly way, adding, however, that my criticism had not been quite just. I took the reproof in the spirit in which it was meant, for I felt at once that it was not quite undeserved. My only excuse was that one cannot say everything at the same time, and that I felt hardly competent to praise the Greek scholarship of his classical work.

Nor is it an easy matter to explain what the real merits of a Dictionary consist in, easy as it may be to point out a few mistaken etymologies here and there. I remember a remarkable occasion when this was done by Mr. Gladstone. The Dean was to be presented with his portrait, and Lord Granville had promised to be present 'to say a few words.' He, however, missed his train, and Mr. Gladstone, who happened to be at Oxford, was asked to take his place. And not only did he take his place, but on the spur of the moment he spoke for half an hour or more, with perfect fluency, on the peculiar excellence of the Dean's Greek Lexicon. Entranced by Gladstonian eloquence one imagined oneself present at the compilation of the materials, as at the building of a temple, when every stone had to be carefully measured and shaped, had to be put down in its right place according to the architect's well-devised general plan, and storey upon storey had to be erected following the growth of meaning and the changes of form of every word, till the whole building was finished—a triumph of symmetry and architectural beauty. The value of Liddell's Greek Dictionary consists in the consummate sobriety of its author. There is never too much, and yet there is hardly ever any essential meaning or any classical passage left out. The various meanings assigned to each word seem to spring up in regular succession, and we seldom find a *Hysteron Proteron* even from a merely chronological point of view. Yet chronology is not the only measure by which the stages or the growth of a word should be determined, and the Dean's good sense has generally kept him on the *via media* between



a purely chronological and purely logical arrangement of meanings. The work has been brought to such perfection in successive editions, each being carefully revised by the Dean himself, that it would not be surprising if the work was now retranslated into German, for there is no Greek Dictionary used in German schools and universities that could claim to be its equal in thoroughness and practical usefulness.

Some of the old objectionable etymologies have now been removed and replaced by others which are supported by Curtius in his *Grundzüge der Griechischen Etymologie*. But such has been the progress of Comparative Philology since the days of Curtius, such, more particularly, the improvement in the more delicate handling of phonetic rules, that a careful revision by a young scholar such as I was in the fifties and sixties, would be very useful even now, and would be highly appreciated by classical scholars, who rightly recognize in every true etymology the prehistoric development of Greek words and Greek ideas.

The Dean's friends were sometimes disappointed that, though his sympathies were well known to be in favour of a thorough reform of the Universities, he kept very much aloof from active strife. They forget, first of all, that after his serious illness in 1856 he had to take great care of his health and avoid all unnecessary excitement. Whatever he wrote, though it was not often, showed clearly where his sympathies lay, but there was no doubt a strong conservative foundation underlying his liberal and reforming convictions. He found plenty to do as Dean of Christ Church, and he had to consider his colleagues there who were so wide apart in their

ideas as Dr. Pusey on one side and Dr. Stanley on the other. When the honours obtained by other colleges were compared with those of Christ Church he often used to say: 'What would become of the young men who have been idle at school, or come from inferior schools, if, like other colleges, we rejected them and picked out those only who are almost fit to take a class in Classics when they matriculate?' He did his best to raise the standard which he found at Christ Church, and knowing that he did as much useful work as was possible with the means at his disposal, he treated a number of sneering articles which ought never to have been accepted by any independent newspaper, with contempt and silence.

He knew very well from what pen they came, and that they could not injure either himself or his college. It was a college which, considering the number of rich and independent young men it contained, was not always easy to manage. Disgraceful scenes occurred now and then, but though the Dean was forced to take severe measures, and though his reproofs were often felt to be very stinging, even those who came under his censure always confessed that the Dean was a perfect gentleman, whatever that may mean when coming from those who certainly had not behaved like gentlemen themselves. Some of these culprits have come out with flying colours in later life, and no one rejoiced more in their success than the Dean himself. He could forgive many youthful sins; he could never forget what was really mean.

It could not but happen that in University matters the Dean occasionally found himself in a minority:

whenever anything that seemed ungenerous and selfish was to be perpetrated, he certainly was always in a minority. But as soon as the voting was over he shrugged his shoulders and began again as if nothing had happened. Public opinion, as expressed by Congregation and Convocation, is generally in good hands, and all comes right in the end, if those who have to vote are left alone. But in so large a body it can hardly be wondered at if now and then the influence of wrong-headed and busy wire-pullers carries the day, bringing up blind voters from the country. In these cases most people felt that it was better to have the one vote of the Dean than the hundred votes of Convocation. His judgement, whether right or wrong, was always just, and when, as occasionally happened, my own opinion as to the merits of a candidate for a University office differed from that of the Dean, I felt not only unsettled, but almost ashamed. Why should he have arrived at a different conclusion? However, great as was his authority in the eyes of his friends, he never used his personal influence to persuade others, if he could not convince them. Proud as he was of his own college, he never voted for a member of the House, if there was a more deserving candidate from any other college in the field. To do so would have been quite correct according to the prevailing morality in such matters at Oxford. If ever he seemed to vote wrong, it was because he depended too much on the judgement and uprightness of his advisers. No wonder that he should have been so often consulted by the Government and other bodies in the selection and election of candidates. There are many who

never knew to whom they owed their advancement, and he was the last man to let them know. Gratitude is a dangerous thing.

Though his friends were mostly those who held advanced or progressive opinions on theological matters, he seldom mixed in any theological fray. He never spoke or wrote against the contributors of *Essays and Reviews*, but he did not contribute himself. This may have been due to his good taste, considering that he was the Dean of a Cathedral, but those who knew him best, knew how reluctant he was through life to speak in public on theological questions at any time. All theological controversy was distasteful to him, and no wonder! He himself was well acquainted with the facts as quoted on either side, but though his judgement was perfectly unfettered by the prejudices of his order, he knew the uselessness, nay, the perniciousness, of most theological controversies. He seems to have arrived early in his life at the conviction that the powers of our mind are limited, and that it is of no use to open the same questions again and again. I doubt whether he ever even read *Essays and Reviews*. I doubt whether he inquired very carefully into the orthodoxy of his friends, as long as he felt convinced that they were true and honest, and did not simply play with edged tools. He was a friend of his friends, but never a partisan. He knew the troubles of an honest theologian, whether clergyman or layman; he also knew that many of those who were called unorthodox were most sincerely religious, nay, most truly Christian. He knew that even reason has its limits, and that to try to transcend these limits is unreasonable.



His eyes had penetrated into the darkness which surrounds us here on earth, and in that very darkness he had learnt his faith. Day after day he did the duty that lay nearest to him, and he was ready to wait for the solution of all our doubts, and to guess from the beauty and wisdom of the world, what must be the love and wisdom of its Author.

Of course, like all good men, he had his enviers and enemies. Even in the University there were those who could not bear his towering high above them as he did, not in stature only, but in character and position. Nasty things were said and written, but everybody knew from what forge those arrows came. They made his friends very angry, but they could never ruffle his own temper, nor reach even to the level of his contempt. Nowhere was his silent influence felt so much as when as Vice-Chancellor he acted as chairman of committees. There was a restraining influence in his very presence; people seemed ashamed of lowering themselves before him by selfish, ungenerous, or unacademic behaviour. No gossip was allowed in his presence, no insinuations were tolerated against anybody not present to defend himself: no uncommon event at meetings, particularly when, at the same time, to disclose what is said on these occasions is considered dishonourable. If a debate had lasted too long, his question, 'Is there anybody who wants to say anything else?' was generally sufficient to stop the flow of not always enlightening eloquence. As to any artifices, of which chairmen are not always guiltless, such as proroguing a meeting instead of taking a vote, postponing a decision in order to secure the presence of

a few more favourable voters, very harmless contrivances, it may be, in the eyes of so-called practical men, or men of business—the Dean would never have condescended to any of them. He knew of no ‘roguery’ that was permissible in order to secure success. Every one who has had the privilege of sitting on committees with the Dean knows what a change his absence made, and how truly and widely his services, nay, his very presence, were appreciated, particularly after he had left Oxford.

Still, much as he was missed by the best friends of the University, no one could grudge him his well-earned repose. ‘It is better,’ he said, ‘that I should walk out than that I should be carried out of Christ Church’—and so it was. It is unfortunate for a University if no provision is made for enabling old men to retire, and to make room for younger men. It is quite possible that an old man may be as good or better than a younger man. But it is only fair that the next generation should have a chance also, whether as heads of colleges or as professors. A professor, for instance, after he has reached the age of retirement, as recognized now in all other branches of the public service, might well be allowed to retire from his position, though he might continue his labours as long as he considers himself capable of doing good; only he should not stop the way, but let his own pupils have their innings. It is not fair to the University that a professor should read off his lectures when his eyes have grown dim, and his MS. has turned yellow. Most sciences are progressive, and old men are not the best expositors of doctrines of a younger school. The old professor should retire

on a pension, and his deputy should begin work on a smaller salary. The Dean's health, as it turned out, would have enabled him to carry on his work at Christ Church for several years longer, or to accept and do credit to even higher posts that were pressed on him. But even to see him surrounded by the loving care of his family, and devoted to the last to the improvement of his dictionary, was a lesson to many who had the happiness of seeing him in his *Tusculum*. It may be true, as Mr. Gladstone said, that the name of Liddell and the fame of his Greek Dictionary will last long beyond that of any Prime-Minister of England. But what we may hope will last still longer, particularly at Oxford, is the influence for good that he exercised there during his active life, and the remembrance of his simple-minded and public-spirited devotion both to his college and to the University. His regard for truthfulness, which he inculcated by his whole life, his belief in the highest ideals, which he never surrendered, and his firm faith in a Divine Providence, which supported him in the trials which were not absent even from his happy and truly perfect life—these form a legacy which he has left to his University, more valuable than even his dictionary.

Have I said too much? I feel that I have said too little rather, and that there are many who could have spoken of the Dean with far greater authority and far more weight than I can. I might have mentioned many of his personal kindnesses to me, but I was afraid. One only I must mention, and that was his effort to keep me at Oxford after I had finished the work which had first brought me there, the edition of

the *Rig-veda*. I had received an official invitation from the Austrian Government to go to Vienna as Professor of Sanskrit, and I had the promise of the Minister of Public Instruction that funds should be provided to enable me to publish the translations of the Sacred Books of the East in Germany. Though death had deprived me of many of my friends at Oxford, it was not with a light heart that I decided to return to my native country. Many were the letters of regret which I received, and which I answered, but it was the Dean alone who spared no efforts to make it possible for me to remain in England. With the help of Lord Salisbury, the East India Government, and the Clarendon Press, he elaborated a scheme to enable me to carry out the plan on which I had set my heart, and to publish the Sacred Books of the East at Oxford instead of at Vienna. I shall say no more on this subject because it concerns myself as much as the Dean. This only I may say, that what at that time seemed to many a wild, a hopeless, and most expensive scheme, has fully realized the Dean's expectations. He lived to see nearly the whole work, in fifty-one volumes, finished and published, the University Press more than reimbursed for its assistance, and myself fully rewarded for the very serious sacrifices, not only financial, which I had to make, and which I made gladly in order to supply the trustworthy materials for a new science, the Science of Religion. The Dean's name, and the names of Lord Salisbury and Sir Henry Maine, were inscribed on the first page of the Sacred Books of the East, and I shall always feel both grateful and proud of three such patrons.



## THE SCHLESWIG-HOLSTEIN QUESTION AND ITS PLACE IN HISTORY <sup>1</sup>.

THE Schleswig-Holstein question, after being for many years the bugbear of newspaper writers and newspaper readers, has now entered into a new phase. It has become an important chapter in the history of Europe, which can never be neglected by any historian, for there can be no doubt that without the initiative taken by Duke Frederick and the people of Schleswig-Holstein the great events of the second half of our century, the war between Prussia and Austria, and the subsequent war between Germany and France, would never have taken place, at all events not under the very peculiar circumstances in which they actually took place. The name of *Zündhölzchen*, lucifer match, given at the time to Schleswig-Holstein, has proved very true, though the conflagration which it caused has been far greater than could have been foreseen at the time. A well-known English statesman, of keener foresight than Lord Palmerston, said in 1878, 'If Germany were to awake, let us take care that it does not find so splendid a horse ready to ride as the Holstein grievance.'

The facts which constituted that grievance, which

<sup>1</sup> This article, which appeared in the *Nineteenth Century* in May, 1897, was submitted to and approved by the highest possible authority upon the facts, who vouched for the correctness of this version of them.

at one time seemed hopelessly involved, are now as clear as daylight. The most recent book on the subject, *Schleswig-Holsteins Befreiung*, by Jansen and Samwer, 1897, leaves nothing to be desired as to clearness and completeness. It is entirely founded on authentic documents, many of them now published for the first time. It furnishes us with some new and startling information, as may be seen from a mere glance at the table of contents. We find letters signed by King William of Prussia, afterwards German Emperor, by his son the Crown Prince, afterwards Emperor Frederick, by the Duke Frederick of Schleswig-Holstein, and by some of the leading statesmen of the time. Some of these documents admit, no doubt, of different interpretations, nor is it likely that the controversy so long carried on by eminent diplomatists will cease now that the whole question has entered into the more serene atmosphere of historical research. Historians continue to differ about the real causes of the War of the Spanish Succession, or of the Seven Years' War, and it is not likely that a Danish historian will ever lie down by the side of a German historian of the Schleswig-Holstein war, like the lamb by the side of the lion. The Schleswig-Holstein question is indeed one which seems expressly made for the exercise of diplomatic ingenuity, and it is but natural that it should have become a stock question in the examinations of candidates for the diplomatic service. What was supposed to be, or at all events represented to be, an insoluble tangle, is now expected to be handled and disentangled quite freely by every young aspirant to diplomatic employment, and many of them seem to acquit themselves very creditably in explaining the

origin and all the bearings of the once famous Schleswig-Holstein question, and laying bare the different interests involved in it.

These conflicting interests were no doubt numerous, yet no more so than in many a lawsuit about a contested inheritance which any experienced solicitor would have to get up in a very short time. The chief parties concerned in the conflict were Denmark, the Duchies of Schleswig-Holstein, of which Holstein belonged to the German Confederation, the German Confederation itself, and more particularly its principal member and afterwards its only survivor, Prussia, nay as a distant claimant, even though never very serious, Russia, and as one of the signatories of the Treaty of London (May 8, 1852) England also.

This Treaty of London gives in fact the key to the whole question. It seemed a very simple and wise expedient for removing all complications which were likely to arise between Denmark and Germany, but it created far more difficulties than it removed. It was meant to remove all dangers that threatened the integrity of the kingdom of Denmark. But what was the meaning of this diplomatic phrase?

The kingdom of Denmark in its integrity comprised the Duchies of Schleswig and Holstein, because in 1460 Count Christian of Oldenburg, who had been raised to the throne of Denmark, was chosen by the Estates of Schleswig and Holstein to be their Duke—by which act Denmark came into direct personal union with the Duchies; these latter were never to be separated from one another. In 1660, Frederick the Third of Denmark upset, with the help of the burghers and by force, the constitution of his country. Instead

of the *right of Election* continuing as heretofore, Denmark became a *Hereditary Kingdom*, and it was left to the King to form a constitution and settle the *Law of Succession*. In consequence of this the *Royal Edict* (the *Lex Regia*) of November 15, 1665, was published by Frederick the Third of Denmark. It secured to the descendants of that King (*not* of those of the other branches of the House of Oldenburg) the succession in Denmark and Norway. If the *male* descendants of Frederick the Third became extinct, then the *female* descendants of this King were called upon to succeed in *Denmark and Norway*; whilst in *Schleswig-Holstein* the *rights* of succession remained to the *male* descendants of Christian the First. As all female descendants were thus excluded from the ducal throne of Schleswig-Holstein, it was evident that after the death of King Frederick the Seventh, who had no sons, the two Duchies would inevitably be lost to Denmark and fall to the nearest male agnate—that is, to the Duke Christian August of Schleswig-Holstein Augustenburg—and thus become, under a German prince, part and parcel of the German Confederation. Danish statesmen deemed it expedient to retain the Duchies for Denmark—above all to separate Schleswig from Holstein, and incorporate it into the kingdom—although the Act of Union of 1460, and documents such as the ‘Letters of Freedom’ of Kiel and Ripen, pronounced any such step to be the greatest injustice towards the Duchies and the princely House of Augustenburg. Even should these old documents be regarded in the nineteenth century as mere mediæval curiosities, still the Salic Law has hitherto been recognized in all civilized states—for



instance, in England. In Hanover the Salic Law prevailed; in England it did not. What would the world have said if after the death of William the Fourth the English Parliament had declared that for the sake of preserving the integrity of the United Kingdom it was necessary that Hanover should for ever remain united with England? Such an act would have constituted a breach of the law, a defiance of the German Confederation of which Hanover, like Holstein—for Schleswig did not form a part of the German Confederation—was a member, and spoliation of the Duke of Cumberland as the legitimate successor to the throne of Hanover. Exactly the same applies to the act contemplated by the King of Denmark in 1848, and no amount of special pleading has ever been able to obscure these simple outlines of the so-called Schleswig-Holstein question. The claims of the other Oldenburg line were second only to those of the Schleswig-Holstein-Augustenburg line, and Russia was hardly in earnest in urging them at a later time in the development of the actual crisis. Besides, the Oldenburg claimant put forward by Russia would never have accepted the two Duchies except as a German sovereign. Schleswig did not belong to the German Confederation.

Whatever Bismarck's views and the views of the Prussian Government may have been in later times, at that early stage the King of Prussia, King Frederick William the Fourth, declared in the clearest words, in a letter addressed to the Duke Christian August of Schleswig-Holstein-Augustenburg, that he recognized the two Duchies as independent and closely united principalities, and as the rightful inheritance of the

male line. Nothing has ever shaken that royal utterance. Unfortunately Prussia in 1848 was not prepared to step in and support the claims of the Duke Christian August and of the inhabitants of the Elbe Duchies. These defended the rights of their country by force of arms—at first supported by Prussia—but were finally subjugated by Denmark with the help of Austria and Prussia. The two Duchies were then considered, or at all events were treated, as conquered territory. The story of the tyrannical government of the half-annexed German provinces during the following years has been so often and so fully told that it need not be repeated here. It showed utter blindness on the part of the party then in power at Copenhagen, but it does not touch the vital points of the question, for neither the armed resistance of the Schleswig-Holsteiners, nor what the Danes called the felony of the Duke of Augustenburg, who had joined it, would affect the rights of the Duchies and their House. This is the point that must always be kept in view, though later events have obscured it to a certain degree, and have in the end changed what was originally a pure question of right into a question of might.

Denmark could be under no misapprehension as to the right of Germany, and therefore of the male branch of the Ducal family, having always been reserved; and it was for that very reason that its leading statesmen tried by any means at their disposal to persuade the Great Powers of Europe to come to their aid by recognizing the so-called integrity of the Danish monarchy as essential to the peace of Europe. Russia, France, Sweden, and Denmark signed the First London Protocol on June 2, 1850, and England

was persuaded by what turned out to be false representations to accept the same on July 4. Whatever right these Powers had to proclaim the principle of the integrity of the Danish monarchy, they could have no right to deprive the Ducal line of its lawful inheritance, or the German Confederation of its protectorate over Holstein. Holstein only was part of the German Confederation, and this latter could only interfere in Schleswig in such matters as touched the rights of Holstein. The recognition of the integrity of the Danish monarchy, however well that name sounded at the time, was therefore neither more nor less than an act of violence, and the secret history of it is well known by this time. Though even Prussia was induced to sign the Treaty of London, in April, 1852, the German Confederation never did, and Bunsen, who was then Prussian Minister in London, though he was ordered to sign the document in the name of the King of Prussia, declared with prophetic insight that the first cannon shot fired in Europe would tear that iniquitous document to tatters. Even the Emperor Napoleon called it a mere *œuvre impuissante*<sup>1</sup>. But in following the history of the Schleswig-Holstein question this phase does not concern us much, for even the Great Powers cannot make an unlawful act lawful. As to England, it was induced to sign the protocol by misrepresentation—that is, by being assured that the representative of the Augustenburg line, Duke Christian August, had sold his right of succession for a sum of £337,500, the fact being, as we know now, that he had been forced to sell his landed property in Denmark, which was valued at

<sup>1</sup> See *Schleswig-Holstein Befreiung*, p. 697.

£619,794, for about half its value; and that, though he himself had promised to remain inactive towards Denmark, he had never given such a promise, nor could he have done so, for his children, or for his brother. Least of all could he have sold the rights of the German Confederation and of the Duchies. How strongly even Bismarck held that view is shown by some notes taken by Duke Frederick of a conversation with Bismarck as late as November 18, 1863, when the Prussian statesman, afterwards so hostile to the Augustenburg family, declared that the Duke was entirely in his right, and that he, Bismarck, would have acted exactly like him. At that time he only regretted that Prussia had ever signed the London Protocol, and he held that, having signed it, it was bound by it, and could not take any active steps against Denmark, even though Denmark had broken some of its promises.

Everybody knew that the decisive moment would come when the King of Denmark, Frederick the Seventh, should die. After the death of Frederick William the Fourth of Prussia in the beginning of 1861, and even during the last years of his reign, when his brother the Prince of Prussia governed in his name, the tone of Germany had become much more decided, and the Danish Government could hardly flatter itself that the German Confederation would quietly look on while one of its members, if only the Duchy of Holstein, was taken from it by an act of violence. In England the feeling was very strong at the time, and in Parliament a very influential voice was raised in favour of sending a few thousand red-coats into the Duchies to frighten away



the army of Germany. Another element came in. The most charming and justly popular Princess of Wales was the daughter of the German prince who had been chosen by the Great Powers as King of Denmark, not so much on account of his being a Prince of Schleswig-Holstein Glücksburg, as on account of his being the husband of a German princess who, after the resignation of several relations, was in the direct line of succession to the throne of Denmark.

In any other country this sentiment of chivalry might possibly have carried the whole nation into a war with its oldest ally; in England the memory of Waterloo was not yet quite extinct, and some, at all events, of her statesmen had not allowed themselves to be blinded as to the real state of the case, the rights of the German Confederation as the protector of every one of its members, and the rights of Holstein, and indirectly of Schleswig, as independent principalities, united to Denmark by a personal union only, which must cease with the extinction of the male line. England has been much blamed by Danish and other publicists for having left Denmark in the lurch; but it should never be forgotten that, though England in the London Treaty had recognized the integrity of Denmark as a European necessity, it had never promised any material aid to the old or to the new king, and could not be expected to rush in where the other signatories of the London Protocol dreaded to go. Hence what happened afterwards when the new King of Denmark maintained the Danish claims on Schleswig and part of Holstein was exactly what might have been foreseen in spite of the troubled state

of the political atmosphere of Europe. The Germanic Confederation did not abdicate its rights or its duties in obedience to the wishes of the Great Powers, or even of some of its own members, but ordered a military execution against Denmark. When that military execution was entrusted in the end to Austria and Prussia, the result could hardly be doubtful. The brave Danish army after a valiant resistance was defeated, and Austria and Prussia then occupied the two Albingian principalities in the name of the German Confederation.

What followed afterwards, however important in its consequences, is of no interest to us in studying the question of the rights of Denmark and Germany in their contest over the principalities of Schleswig and Holstein. The German Confederation as such never doubted the rights of the Augustenburg line. Prussia, however, soon began to take a new view. It saw that there was only one remedy for the weakness of Germany as a European Power, only one way of preventing the repetition of a Treaty of London, in which Germany, in reality the strongest Power in Europe, had been openly treated as a *quantité négligeable*, namely a real unification of Germany with the exclusion of Austria, and under the hegemony of Prussia. Prussia staked her very existence on the realization of this ideal, and naturally, as in a struggle for life or death, disregarded all obstacles that stood in her way. Bismarck with his enormous personal influence on the King persuaded him to disregard the rights of the Augustenburg line, because he considered the addition of a new independent principality in the north of Germany, and in possession of the harbour of

Kiel, as a source of weakness and possible danger to that United Germany of the future for which he had laboured so long, and for which he was ready to sacrifice everything. Fortune was on his side, he played *Va banque!* and he won. Well might he say *Audaces fortuna juvat*, and well did he say *Inter arma silent leges*, and not only *leges*, but also *jura*. No one was more fully convinced of the rights of the Ducal line of Augustenburg than he was. We know now from his own letter on what terms he was ready to recognize these rights, and to allow to the Duke Frederick, eldest son of Duke Christian Augustus, an independent sovereignty. But events were marching too fast for carrying out these smaller arrangements, and at a time when kingdoms like Hanover were simply annexed by force of arms, it was not likely that better terms would be granted by victorious Prussia to the small principalities of Schleswig-Holstein and their legitimate Duke.

In the book before us, which has been very carefully compiled, and against which we have but one complaint to make, namely that it contains 800 closely printed pages, the events which followed the execution as ordered by the German Confederation against Denmark, and the occupation as carried out by Prussia and Austria, are fully detailed. Austria and Prussia soon began to quarrel over the administration of the two principalities, Prussia in Schleswig, Austria in Holstein, and when Austria, against the wish of Prussia, actually summoned the Holstein estates to assemble and to settle their constitution under the Duke of Schleswig-Holstein-Augustenburg, the die was cast. Prussia, however, had at the time

12,000 men in Schleswig, Austria but 5,200 in Holstein, so that when an outbreak of war between these two Powers seemed imminent, nothing remained but to withdraw the Austrian *corps d'armée* as quickly as possible, and to leave Prussia in military possession of both Duchies. How well Prussia was prepared for war was shown by the events that followed in rapid succession. In June, 1866, Austria brought forward a motion in the already expiring Diet of Frankfort to issue a decree of military execution against Prussia. But on the day after this motion was accepted, June 15, 1866, Prussia declared war against Hanover, Electoral Hesse, and Saxony, conquered them, and after having thus secured its safety in the rear marched boldly into Bohemia, and in seven weeks broke the whole power of Austria, while, by an agreement with Bismarck, Italy declared war at the same time against Austria.

When we consider that the battle of Sadowa, which left Prussia the sole master in Germany, had its natural sequence in the battle of Sedan, which left the French Emperor prostrate before the armies of Germany, we shall be better able to understand the deep historical importance of the long ignored and long ridiculed Schleswig-Holstein Question. No one who wishes to understand the history of Germany, and afterwards of the whole of Europe from the year 1848, can dispense with a careful study of that question, which, as we hope to have shown, is by no means so intricate as it has been represented. With all respect for our diplomatists we cannot help feeling that any English solicitor would, after a very few days, have been able to place the true aspect of that



question in the clearest light before any English jury at the very time when the greatest English statesmen and the greatest English newspapers went on declaring day after day that it was a question far beyond the reach of any ordinary understanding. No lawyer would be forgiven for declaring his incompetence to form an opinion on the facts placed before him, and on the rights and grievances of the different claimants of the throne of Schleswig-Holstein after the death of Frederick the Seventh of Denmark.

It is this purely personal question which is evidently very near to the hearts of the two authors of the book, *Schleswig-Holsteins Befreiung*, and it is for that very reason that this publication will always retain its historical value. Though it is free from the spirit of mere partisanship, its authors do not wish to conceal their strong feelings of sympathy and admiration for the chief sufferer in the liberation of Schleswig-Holstein, namely the Duke Frederick, whose beautiful portrait adorns their volume.

There are historians who look upon the great events which we have witnessed in our time as the inevitable result of forces beyond the control of individuals. To them all political convulsions such as the violent collision between Prussia and Austria, and the subsequent intervening struggle between Germany and France, are like earthquakes long foreseen by seismological politicians, and impossible to be retarded, accelerated, or warded off by any personal efforts. They would scout the idea that if Lord Palmerston's heart had been less of a *cœur léger*, or if he had not felt himself hampered by the Don Pacifico affair, or if

the Protocol of London had not been signed by him, the conflict between Denmark and Germany would not have reached its acute stage, and the battles of Sadowa and Sedan would never have been fought. Everything in history, as in nature, takes place, according to them, in obedience to laws which allow of no modification by the hand of man. Yet they should not forget that even an avalanche is sometimes set rolling by the flight of birds, and that a lucifer match carelessly trodden on by a sentinel may cause the explosion of a powder magazine. It may be quite true that when a great avalanche is once set in motion, overwhelming whole forests and destroying village after village, we cannot expect that one single tree or one single chalet should be able to arrest its course. But the true historian, however much he may feel inclined to see in history, as in nature, a process of evolution, cannot and ought not to forget the individuals who act or who suffer in the birth and death struggles of humanity. If he did, he would deprive history of all its human interest, of its dramatic character, and its moral lessons. Could we really understand the events of the second half of our century without a study of such personal characters as Queen Victoria, the Emperor Napoleon, the German Emperor, Moltke, Bismarck, and Mr. Gladstone? In one sense every private soldier of the German army who left house, home, and family, to die at St. Privat may be said to have decided the fate of Germany and of Europe. If the German army, as drilled by Moltke, was the horse that won the race, it was Bismarck who was the jockey and knew how to ride it and to make it win.

If, then, in the Schleswig-Holstein struggle also, we want to know its authors, its martyrs, and its heroes, the name of Duke Frederick of Schleswig-Holstein ought never to be forgotten. He was born to a ducal throne in one of the most delightful and prosperous provinces of Germany. He was, if any German prince, convinced of the necessity of a real union of Germany, and of a union, as he thought, under the auspices of Prussia. He, more than any other German prince, was ready to give up any of his princely rights and privileges that might conflict with the requirements of a strong central power wielded by Prussia. Under the most trying circumstances and at a time when many a German patriot hesitated between Austria and Prussia, he never seems to have swerved in his loyalty to Prussia and in his personal devotion to King William the First, afterwards the first German Emperor, to the Crown Prince and the Crown Princess, afterwards the Emperor and Empress Frederick. There is only one voice among those who knew him best as to his noble character and the high principles by which he himself was guided through life. Sybel, the great historian, who knew him well and who seems to have long suspected that Bismarck wished to incorporate the Duchies in Prussia rather than to support their independence under their own Duke, said in the Prussian Chamber:

‘And who is that Duke of Augustenburg? He is the living expression of the rights and of the inseparability of the Duchies. His name is to a brave German race in the north the bearer of all that makes life worth living, the bearer of freedom and nationality. He is strong in his very weakness,

because his own people desire him, so that whether an appeal were made to the estates or to universal suffrage in Schleswig-Holstein, his title would be unanimously proclaimed between Eider and Königsau. . . . So long as this state of things continues he will be invincible, for the freedom of a united and determined people is invincible. I know that the Schleswig-Holstein people reckon among their rights—and these rights the Duke has declared that he will respect—as the first and most precious right the claim of the male line to the succession in the principalities. They do not wish to become Prussian. They wish to remain German, and they will follow Prussia with their warmest and grateful sympathies so long only as Prussia itself moves forward in the road of a truly German policy.'

All over Germany the Duke was trusted and loved, and we have the strongest testimony of his numerous friends as to the straightforward, unselfish, and truly noble character shown by him throughout all his trials. The very names of his friends enable us to judge what kind of man he was. His best friends were the Crown Prince Frederick of Prussia, the unfortunate Emperor Frederick, and his eminent and high-minded wife, the late Prince Consort, the Grand Duke of Baden, and such men as Baron Roggenbach, George von Bunsen, and many others whose names are less known in this country but highly respected in their own. He had no enemies except at Copenhagen and at Berlin. Bismarck knew that the Duke had powerful friends, and that even in his weakness he was a power that had to be reckoned with. What part the young Duke formed in the old statesman's political



calculations Bismarck has openly stated himself. He declared in the Prussian Chamber on December 20, 1866: 'I have always held to this climax, that personal union with Denmark would be better than the existing state of things; that an independent sovereign would be better than such personal union, and that union with Prussia would be better than an independent sovereign.' The Duke was not strong enough to cope with such an antagonist, but even when after the battle of Sadowa all his chances of succeeding to his rightful throne were gone, he was able to rejoice in the liberation of his Duchies from a foreign yoke. He joined the Bavarian contingent of the German army in the war against France, and assured the German Emperor in a letter of July 28, 1870, that in the national war against France all other questions must stand aside, and that every German had but one duty to fulfil, to defend the integrity of Germany against her enemies! No attempt was ever made by the deposed Duke and his family to disturb the peace of Germany by a new assertion of their old rights. The Duke felt that he had done his duty to his country and his family to the very utmost, and that he might retire with honour from an impossible contest.

By a kind of poetical justice, this self-denial on the part of the Schleswig-Holstein family has met with a great reward. Prince Christian, the brother of Duke Frederick, married a daughter of Queen Victoria, the kind-hearted and beloved Princess Helena, and has found a new sphere of usefulness in a country so closely akin to his native land; while his niece, the daughter of Duke Frederick, was actually chosen by

the present German Emperor as his consort. So that in future the blood of Schleswig-Holstein, blended with that of Hohenzollern, will run in the veins of the Kings of Prussia and the German Emperors. Let those who like call all this mere accident; to a thoughtful historian it cannot but convey a lesson, even though he may hesitate to put it into words.

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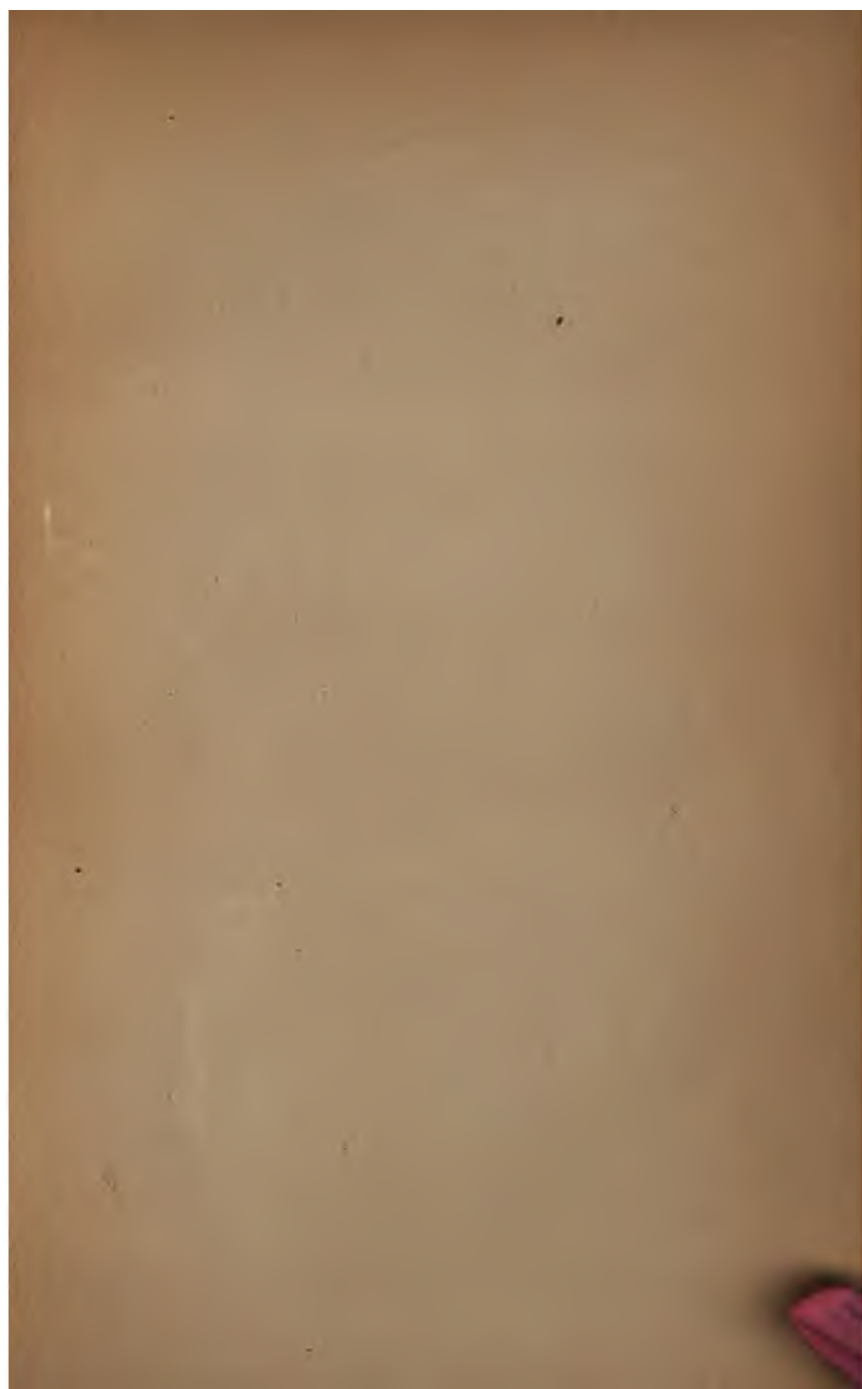
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